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YOGA AND SAMADHI

By

Barry Pramar

(The RAJA of BARWANI)

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Trance *Samadhi* is a state of mind, a temporary state of mind where the objective world ceases to be in so far as a particular subjective mind is concerned. There is nothing really supernatural about it. It is a drawing-in of all the senses of perception to their seat and the stilling of desire and will. We can all of us get into this state but it is not necessary for everybody to try and attain it. It is not an end to all human seeking for knowledge of reality and self nor is it an essential for 'peace of mind'. For some it is a necessity but only as an experience, or at best as an approach to the knowledge of reality. Translated true *Samadhi* means 'equilibrium conscious', an equanimous state of the mind in its relationship to the objective world. But as it is attained and practised by most Hindu mystics it can only be a phase of mind experience; a 'super-trance' which is self-imposed, and is often brought on by the attachment of a hyper emotional temperament to a scriptural personality or a 'personal God', set up as an ideal.

These self induced 'trances' do help a very great deal in the attainment of spiritual knowledge—knowledge of the why, the wherefrom and the whereto—and of a peaceful state of mind in every-day life. For those who are built in a particular way it is an essential stage of spiritual development.

Great attachment to one's work, such attachment that one forgets all other things including the desire for food and sleep, can bring on a form of *samadhi*. In fact any great attachment to the exclusion of all other normal causes of passion and emotion can be the cause of certain forms of *samadhi*. We hear of women swooning in the arms of their ideal lover, we also hear of devotees of Krishna or Ram or Muhammad swooning in an ecstasy of love. There is no fundamental difference between the two, except that one is due to attachment to, and intense pleasure through, an object to which the mind has attributed the most perfect qualities, which must in the very nature of things be imperfect, changeable, and hence destructible, and the other a deliberate creation of the mind, and hence of permanent excellence in so far as that mind is concerned and indestructible and unchangeable in itself.

The desire for such ecstasies is in all human beings but the experience of such ecstasies does not necessarily lead one to a fuller and dispassionate knowledge of the life principle. Such experiences

may lull one to a form of peace within oneself, due to their power of detaching the mind from all other things, but this is far from the knowledge of, or oneness with, reality. This desire for pleasurable ecstasies may even to great harm in the path of the mystic *Yogi* due to its effect of lulling the higher desire for pure knowledge and the finding of a correct way of reaction to life. It is a search for personal joy more than for truth. But if one is desirous of attaining knowledge through *Yoga* and only capable of attaining it through emotional devotion (*Bhakti*) to the ideal, then such ecstasies are to be encouraged for reasons which will be explained later. The ecstasies or passions of religious fervour which many aboriginal tribes in India, Africa, and America experience, or that of some sects of the Muslim faith, are also a form of *samadhi* (passion sublimation). But actually these are natural inborn instincts of primitive man and are akin to the states of passion attained by animals when mating or when fighting for their young.

A slightly more refined form of such ecstasies is experienced in *Hatha Yoga* trance—a state of existence very akin to that of lower forms of life which seasonally hibernate. The only difference is that the *Yogis* bring that state on themselves through conscious effort and the animals resort to it through their natural necessity.

It is pertinent now to explain the trance—state of a *Hatha Yogi*. When such a *Yogi* is resting in his form of trance all the functions of the body are decreased to the utmost minimum. Metabolism almost ceases. Perceptible rhythmic breathing ceases completely. Very minute quantities of oxygen are absorbed. The conscious mind is absolutely stilled, only the unconscious functions and this too only to the extent of keeping the body alive. Except to the vital organs, circulation is almost completely stopped. The temperature of the body is considerably lowered. Such a trance and the arduous practices necessary to attain it are almost useless to intelligent and rational persons. The only good such practices and consequent trances do is that, the catabolic system being much relieved, it performs its eliminatory task more readily thus making the brain and nervous system physically healthier.

There exist, however, other forms of *samadhi* which are exceedingly beneficial to the seekers after higher knowledge. Such persons differ markedly from the devotional (*Bhakti*) type of *Yogi*. The latter is generally a person whose psychological outlook is that of an escapist. He is one who for personal reasons has always tried to get intense pleasure out of attachments to other things and to people, and succeeded; or else one who has tried but failed to do so. Emotional devotion is the least harmful form of escape from the temporary reality of physical existence; hence it should be encouraged even though

such a path rarely leads to the attainment of ultimately true and complete knowledge. It is usually a harmless and joyful soporific but it can only be self-administered and self-desired. A teacher may rationalise and systematise the path of devotional attachment as far as possible, but it can only be a preliminary and hence an imperfect way at best. Nevertheless, at no time should it be discouraged, nor should the devotee be forcibly disillusioned with its imperfections as this may lead to deep frustration. Such disillusionment will come slowly and in its own time. The mind has infinite powers of adjustment and healing, provided it is not foolishly or prematurely interfered with. It is necessary to emphasise this last point because the present-day trend of Western culture, (which is also being increasingly imposed on us in the East), wishes even to disown and disprove the only thing that the distressed or down-and-out person has to fall back upon, namely, God. Of course, when devotion (Passion Sublimation) leads to masochistic tendencies as in the case of some religious penitents during the middle ages of Europe, or to the self-imposed ascetic ordeals of so-called Indian *Yogis* and *Fakirs*, then not only discouragement but legal or psychopathic treatment seems to be indicated to prevent or cure such madness.

Here it is necessary to make clearer the meaning of *Yoga*. The word *Yoga* means, to join; the joining of two things which are component parts of each other, which in reality are one, co-existent, but have lost consciousness of this oneness. The rehabilitation of this consciousness is the aim of *Yoga*. The merging of the individual ego (urge) into universal consciousness is made easier through the practice of *Yoga*. And the practice of *Yoga* (*Gyanayoga*) produces *Samadhi* when for the time being the mind loses its personal identity or rather merges its individuality in that of universal or cosmic consciousness. The approach to this state is gradual. First there is a slow unawareness of objects, sounds etc., and all outside objects cease to affect the mind. Then even awareness of the body and its senses slowly diminishes until there is a sort of void created, inasmuch as no impulses are carried to the mind via the senses and brain, nor are impulses sent out. Even memory ceases to have the power to recreate thoughtforms from past experiences and attachments. This slow process of the drawing inwards of consciousness or awareness in the mind of the objective world culminates in the *Gyana Yogi's Samadhi*.

This state can be divided in to two degrees: *Savikalpa* and *Nirvikalpa*. The first degree is a preliminary to the latter and has limitations; it has the element of desire and effort behind it, and to some extent the conscious mind functions; the second is the highest state of mind-existence where all limitations of time, space and causation

are gradually transcended, the conscious mind completely loses its existence (ability to function) and the subconscious and 'paracons-cious' become, as it were, observers of the process of creation and destruction. That is to say, the man becomes fully aware of and one with the phenomenon called life, (formless life), having first absorbed scientific understanding of this phenomenon in such a way as to deepen rather than detract from his immediate sense awareness of its manifestations and then in *Samadhi* passed through and beyond both to a consciousness of his oneness with all life. Such a growth of awareness might be compared with the relationship of two friends. They meet and are attracted by each other's appearance and outward personality. This is sense experience. They then learn about each other's history, family, education, traditions, which is intellectual knowledge. Such knowledge at first separates them but when it is assimilated they come to see each other in relation to his background and the awareness is stronger and truer. Finally their relationship may become so deep that consciousness of each other's appearance or conscious thought about the facts connected with him, indeed all sense of his separate existence disappears, the two are profoundly known to each other and begin to feel in terms of each other. The same might be said of a man's knowledge of a flower, first with the eyes, as a child, and then with the brain, as a scientist last as a poet-philosopher to whom the flower has become one manifestation of the life of the universe, of which he himself is another manifestation. What happens to the personalities of the *Yogis* when they are in this lofty state cannot be described since only that which exists within limitations can be described in words. Such states can only be felt and experienced by an individual and for the individual. To attain such a state of mind-existence a particular phase of the cosmos is chosen by the *Guru* and the seeker is required to fix his mind on it so deeply that the mind ceases to have contact with any other aspect of life. Sometimes it is on sound or light, at other times it is on the 'I'. What am 'I', where have 'I' come from, why, and so on. Again some *Gurus* recommend a questioning search for the Creator by first assuming that these is one. The main idea beind it is that if the mind can see the evolution of matter and life from the point of its *Dhyan* (point or phase of cosmos or theme on which the seeker is con-centrating) it will see the oneness of all matter and life and thus be able to lose the sense of difference between itself and other phases of cosmic energy or matter. This is the path of the *Gyanayogi*.

Karma Yoga—*Yoga* through *Karma* or action is a later and newer development and had its origin in the philosophy of-action of the *Gita*. The performance of one's duty to self and otherselves, without attach-

ment to result, and in particular the result to oneself, is the meaning of *Karma Yoga*. (*Anashakta-Karma-Yoga*). This is actually a part of *Raja Yoga* which is explained below. There is one great difference between *Karma Yoga* and its parent *Raja Yoga*, and the other *yogas*, namely that in the former the aspirant does not go into any 'trance' *samadhi* nor does he have to lead an irrational or severely austere life. But he has to start with certain philosophical assump-tions. He has to believe no God, matter, and the life principle. He has to believe in the essential good in all creation. His mind has to stop questioning the why, the whereto and the wherefrom. The only question he may ask himself in this, his process of realisation through action in the realm of every day life, is whether any particular act to be performed is right action or wrong action. To put it simply, this is a path of unquestioning universal service which must eventually lead to the merging of the personal ego (urge) in the world of exist-ence. There is nothing psychic or pedantically philosophical in this path. It is the path of the ordinary and simple individual with an uncomplex mind who wishes to find a simple rule of living (*Anashakta-Karma-Yoga*) and who is prepared to accept temporarily the simple facts of life, namely of God, Man and the Universe.

In attempting to explain *Samadhi* and *Yoga* and their utility, the writer is convinced that such an explanation ought to be supplement-ed by the statement that even more essential than the experiencing of the highest trance-*Samadhi* (*Nirvikalpa-Yoga-Samadhi*) is the finding of a way-of-life, a way-of-reaction-to-life, a philosophy suited to one's psychology, environment, etc. This means that a dispassionate and true knowledge of the particular self and a general knowledge of other selves, a general knowledge-scientific-understanding of life as we know it thus reaching to the understanding of the complete co-ordination of all forms of nature and life, is the first essential to a perpetual state of *Samadhi* (equanimity and poise of mind) whose attainment the writer would recommend to all. This *Samadhi* may be described as a gradual shedding of all unessentials, physical, intel-lectual or emotional, the development of a frame of mind whereby tranquillity is never lost through outside influences, an adjustment of one's whole self to life through a knowledge of self and hence of its place in the order of things. This the Hindu *Yogis* call *Raja Yoga* and before he can become a *Raja Yogi* the aspirant has to practise *Karma Yoga*. The attainment of such a frame of mind, whatever it be called, by any means known, or so far unknown, to man is the truest and best form of *Samadhi*. This is the philosophy of the Gita, this is the true ascetic teaching of Christ and this is what our know-ledge of physics, chemistry, biology mathematics and psychology and especially present-day chaotic world conditions are forcibly and even

cruelly leading us to understand. How not to create jarring impulses for others or be jarred by outside influences is 'the way of life', and the individual can employ any method, any exercises of the mind, any system of *Yoga* he chooses.

To sum up; *Samadhi* means tranquility, serenity in one's own life wherein one is not affected by outside influences. Hindu *Yogis* of different calibre recommend four ways of attaining *Samadhi* which, it is claimed, gives a true and dispassionate understanding of life. *Hatha Yoga*—a forcible giving up of all sensual desires whereby it is hoped to kill all attachment. *Bhakti Yoga*, the complete enveloping of the mind by the self-created-super-induction of a personal God, a state wherein all other desires are either completely stilled or made secondary to the one desire, that of love or oneness with the Deity. *Gyana Yoga*—the dispassionate knowledge of self (soul) and the emotional and intellectual realisation that the not-self is a virtual creation of self. In other words the knowledge attained through austere living and certain practices that the objective world actually and really is a creation of the subjective mind. *Raja Yoga*—a slow adjustment to life, not a giving up of anything but rather a knowing through reason and emotion, of the proper place for all the component parts of life, a knowing of one's own part in the order of things which develops a capacity for possessing without attachment and giving up attachments or letting things go without sorrow, in so far as one's own life is concerned. In such a state, sex, anger, avarice pride attachment, and even the 'I' (*Shatha-Vikara*) become impersonal. Unless one can develop such a frame of mind, there can be no enduring peace or lasting happiness.

Deep intellectual enquiry is not alone sufficient; the emotional part has to be co-ordinated and disciplined by reason, and reasoned dispassionate action; here *Yoga*, or rather the ultimate result of *Yoga*, *samadhi*, does help very greatly.

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Advaita and Causality and Human Freedom

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Advaita, Causality and Human Freedom

It will be the aim of this paper to treat in some detail the notion of causality as set out in and criticised by the *advaita vedānta*, consider its affinities if any with the conception of cause in modern science and discuss the bearing of these views on the problem of human freedom. In the course of the discussion I shall specifically refer to two books—Prof. Stebbing's *Philosophy and the Physicists*[1] and Dr. Brahma's *Causality and Modern Science*.[2] I have neither the time nor the ability to discuss the former in full; I shall content myself with a consideration of the tenth chapter on 'Human Freedom and Responsibility'. The second book presents more a point of view than a detailed exposition; and with this, though in agreement to a large extent, I have to express dissatisfaction in some measure.

I

The advaitin's ontological position has been often stated and requires little repetition. Reality is non-dual; it is consciousness or experience, self-luminous by nature; it is eternal and free. On this are super-imposed as appearances duality, inertness, cognisability in dependence on another, dependence, impermanence, and so on. The super-imposition is the work of nescience. This is not real as then there could not even be the realisation of it as nescience, leading to its sublation; it is not unreal, since duality and dependence are facts of immediate experience in no wise comparable to the impossible barren woman's son or even to the barely possible, but not actual, hare's horn; it is therefore considered indeterminable, not characterisable as real or as unreal,

1 Methuen, 1937. 2 Allen and Unwin, 1939.

anirvācya. All limitations, and all relations among the limited fall within the realm of this nescience, which is neither co-eval with reality nor falls outside of it. Finitude and plurality being phenomenal, the relations among the diverse, such as time, space and cause are also phenomenal. They cannot claim to hold good absolutely, whether for all or everywhere.

Though such a position is not attractive or convincing on the face of it, a little consideration would seem to make it acceptable in the case of space and time. Analysis of these reveals two sets of difficulties. We seem unable to set limits to space and time though, obviously, spatial and temporal characteristics belong only to the finite. What is bounded in space, and what has a beginning or end, these are certainly finite. Space itself, however, cannot be bounded; what lies outside space? If it is more space, it means we have not so far come to the limits of space; if it is non-space, we have to admit that the spatial finitude of our experience derives from something determined, if at all, in the last resort by something which is not space; and this, in effect, will not differ from conceding the phenomenality of space. One may contend that space is infinite though spaces are finite. This again will be the admission of advaita in another way—the admission of the possibility of finitude being an appearance of the infinite, limitation an appearance of the limitless, the many an appearance of the one. It may still be argued that while the advaitin considers the many and the finite to be appearances, the opponent treats them as real just as much as the one and the infinite. To maintain in the same breath the reality of opposed qualities like infinitude and finitude is to fly in the face of the law of contradiction and refuse to think. Justification based on the category of identity-in-difference will prove but a broken reed, as will be seen presently. It may be said that an infinite cause may have finite effects; with this contention we shall have to deal in the consideration of causality. This possibility excepted, there seems no way of avoiding the phenomenality of space. So also of time.

The other set of considerations mentioned relates to experiences like dreams. The contents of these experiences are actual enough and enjoy spatial and temporal properties very much at variance with the setting of the dreamer in what we call actual, i.e. waking, life. While the dreamer's body lies in Madras, the dream relates to Benares or to the battle-front. While the dream occupies what corresponds to a few minutes of our waking time, the dreamer often grows up, gets married, achieves success and even dies within that period. There would thus seem to be different and conflicting spatial and temporal systems within our experience. Even within waking experience, consider the phenomenon of reverie. In the course of a few minutes we run through a course of events which occupied a considerably longer interval of time. Is the latter contained in the former? If so, how can this be unless the interval which seems so variable is also negligible as ultimate reality, unless time is phenomenal?

Similar considerations may be raised in regard to causality too. It has been argued that causal efficiency is no proof of reality; the dream food satisfies dream hunger though not waking hunger. But these arguments are not quite conclusive in regard to causality being phenomenal. The causal efficiency of the dream content has indeed been used in the reverse way by realists like the Mādhvas to establish the reality of that content. Further, though he who dreams of Māhiṣmati does not wake up there, he who dreams of a snake wakes up often with actual trembling; the victim of a nightmare actually cries out; and the physiological consequences of an erotic dream belong to the waking order of experience. It was also noticed that an appeal may be made to causality in order to exhibit the reconcilability of one and many, finite and infinite. The notion of cause, therefore, seems to stand on a slightly better footing than

space and time, from the point of view of the anti-phenomenalist; and it deserves a fuller consideration.

The advaitin, like the follower of the sāṅkhya holds to *sat-kārya-vāda*, the doctrine that the effect is not a creation *de novo*, but is prefigured in the cause. The sāṅkhya arguments for the position are well known. Either there is or there is not a time interval between cause and effect. If there is, does the cause wholly cease to exist, before the effect comes into being? In that case, the immediate antecedent of the product would be a non-existence; and though we may in speech distinguish non-existence of X from non-existence of Y, there is in reality no way of distinguishing one non-existence from another. Thus, so far as the immediate antecedent goes, we have no explanation why X is the effect, not Y; theoretically any effect may follow from any cause; sand may produce oil, and water curds; for between the alleged cause and sought effect, there is interposed a non-existence, whose character can be but homogeneous. Yet in practice we do not get curds out of water; we treat the effect as derivable only from a potent cause. What can this potency be except the pre-existence of the effect in the cause, in a latent form? If, however, no time-interval be admitted between cause and effect, we have to take them as either identical or as wholly different; in neither case is the cause-effect relation possible; cow is not the cause of itself; nor is it the cause of a horse; co-existent differents are no more cause and effect than the two horns of a bull.

With this line of sāṅkhya criticism of the vaiśeṣika creationist position, the advaitin has great sympathy. He will not, however, subscribe to the ultimacy of the causal concept; for if the sāṅkhya criticism is pressed to its limits, the concept has to be abandoned. The critic of the creationist view can admit the pre-existence of the effect only in a latent form; the causal operation serves to make it patent or manifest. The questions raised about the effect may be

raised about its manifestation too. Is that pre-existent or not? If pre-existent, it could be only as manifest, since it is absurd to say there is manifestation, but as non-manifest; and if manifestation is pre-existent, it amounts to the admission of the effect as fully pre-existent, not merely as a potentiality; and such an effect needs no explanation in terms of causal operation. On the other alternative of manifestation being produced *de novo* by the operation, what is the special virtue of this effect, that it alone is susceptible of creation, not the effects which become manifest? It seems legitimate to conclude that the sāṅkhya while envisaging a difficulty has, instead of solving it, only pushed it back one stage. And the difficulty seems insoluble so long as we stick to the distinctness of cause and effect. We seem nearer a solution, if we deny the distinctness treating cause and effect as appearances of the same reality. This is in effect what the advaitin does. The non-distinctness is asserted not as between finite causes and effects in the world, but as between the world and its cause, Brahman. The causal relationship is to be understood as between the substrate and the super-imposed, the rope and the snake; but for the rope there would be no snake-delusion there; it is present only so long as the rope is there and disappears into the rope, when the latter is truly known as such. The effect, the delusion, is nothing other than the cause, though it appears to be different. The causal relation is based on this delusive difference. It is, so to speak, subjective; and this subjectivity will, one may expect, infect all derivative finite causal relations too. The advaitin, however, maintains the relative objectivity of finite causal relationships. Causality is no doubt a product of nescience; but so long as we live in a world of nescience, without rising above it to that which is neither cause nor effect, we have no right to impugn causality; it is as objective as the world is; even for the transcendence of nescience we depend on this concept, since we have to depend on means like instruction, reflection, contemplation, etc.

If these were not well-settled causes, they could not be depended on by us in our laudable endeavour to realise ourselves; and yet when we do realise, the very means which furthered our endeavours appear delusive. The needs of science and metaphysics seem to be equally satisfied by the invocation of two worlds. Whether causal rigidity in the empirical world is consistent with denial of causality in the transcendental world is a problem which we shall have to pose in the course of this paper. The orthodox advaita position would seem to admit of some improvement.

We have to note in the meantime that the cause would seem to find no logical resting place short of Brahman; and in Brahman it seems to annul itself along with the effect. This is how. The concept in question is an attempt to understand change. It attempts to explain what is fleeting and limited in time, what was not, but is and may cease to be, what in other words is occasional and impermanent. The presumption in any such explanation is that the permanent and the unchanging is self-explanatory; by being related thereto the transient may be made intelligible. A mere relation of one thing to another does not satisfy *per se*. It will no doubt be said that explanation consists in relating the unknown to the known, not the fleeting to the permanent; even in this way of conceiving explanation it must be remembered that the known implies a relatively unified and relatively permanent system; and the permanence of the knowing self at least is in most cases assumed. Without the relation to something more permanent or fundamental, no phenomenon finds explanation. The goal of explanation would seem to be therefore the exhibition of the relation of the changing to that which is above change. Hence it is that *pradhāna* and primal atoms alike are conceived as unborn and eternal. Where the world is declared to arise out of a First Cause, such cause is itself not a product and is conceived as above space and time. This indeed is the merit of the causal concept, that, however inconsistently, it rises above the very limitations and diversities which lead to its invocation and seeks to reach infinitude and unity. The relating of one phenomenon to another may give some temporary or practical satisfaction; but we cannot logically stop short of the noumenon above the phenomena.

And when we do get to the noumenon, whether by reasoning or testimony or both, we still seem to be no better off logically. The noumenon, Brahman, the supreme and sole reality, is the cause. The effect cannot be spoken of as such unless there is some difference from the cause. Hence the world though differing from Brahman in respect of finitude, inertness etc., may well be-cause of this very difference be the effect of Brahman. The world is not eternal and constant; else it would not be an effect; nor would it require explanation, as the eternal is self-explanatory. It is not real in the way that Brahman is real. Nor is it unreal, as in that case it would have nothing at all in common with Brahman and could not be its product. The effect shares with the cause the negation of unreality; it differs from the cause in falling short of reality by which we understand what is always and for ever. The phenomenon in other words is indeterminable as real or as unreal; hence its relation to the noumenon can have no better status; that too, must be but indeterminable or phenomenal. The advaitin does assert the non-otherness of effect from cause; he does not however assert their identity in such wise as to deduce for the effect the reality of the cause; the negation of otherness amounts only to this —that the effect has no reality other than that of the cause.[3] Hence, it is that the promissory statements of *śruti* can be justified as to the knowledge of all (effects) through knowledge of the one (cause).

3 Cf.: "na khalv ananyatvam ity abhedam brūmaḥ, kiṃ tu bhedaṃ vyāsedhāmaḥ"—*Bhāmati*, II, i, 14.

It is worth while sparing some attention here to the notion of identity-in-difference as connected with the causal concept. Identity and difference may appear *prima facie* irreconcilable contraries; but their co-existence, one may contend, is both possible and actual, as will be seen if we look at the many transformations of a single cause. Hail and snow are different; so are bracelet and ear-ring; yet these differences co-exist with the fundamental identity of each pair, in the causal aspect, i.e., as water and as gold. As cause there is identity; as effect there is difference. One has to ask what the relationship is between the cause and the effects. Is it identity or difference? If identity, then, what holds good in the causal aspect should equally hold good in the effect-aspect too, so that there is no propriety in restricting the identity of hail and snow only to their causal aspect; they must be identical even as products, a conclusion commendable neither to common-sense nor to the opponent. Suppose, however, there is difference between cause and effects; then between hail which is different from water and snow also different from water, how can there be identity in the causal, i.e., water-aspect? We shall have to resort here again to identity-in-difference, a procedure tainted with the charge of self-dependence or infinite regress. Further, when because of identity-in-difference there is intermixture between the causal and effect-aspects, how can there be the restriction of identity to one of these aspects? We are again faced with the violation of common-sense.

The real is the cause; the effect may not be identical therewith nor different therefrom; nor is difference *cum* non-difference intelligible; the effect is neither real nor unreal; one term of the causal relation being thus indeterminable, the relation itself is indeterminable.

This conclusion may be due to our illegitimate attempt to extend the causal concept beyond the phenomenal realm, where alone it can be legitimately invoked. Phenomenal causality knows

nothing of these transcendental difficulties. The relation between one phenomenon and another can be so refined as to be invariable and unconditional; and with this all reasonable ambitions of causal explanation will have been satisfied. In answer to such an objection let us undertake a still closer investigation of the causal concept.

The *advaitin's* examination of cause as conceived by the realists of the time is very instructive and can perhaps be hardly improved upon. The cause is usually conceived as an antecedent in time. Of course, not any antecedent will do, e.g. a donkey standing by the potter's shed is not a cause in respect of the production of a pot. We refine the notion by the qualification of invariability; we know that the donkey is not an invariable antecedent. But our difficulties seem to be just beginning. Those who enumerate causes admit causal efficacy not merely for distinct events in time, but also for certain common conditions like time, space, *Īśvara*, etc. *Īśvara* is above time, hence not an antecedent in time. Time itself is not in time and hence cannot be treated as such an antecedent. An ingenious attempt will claim that though there are no temporal distinctions for time, they may be understood through adjuncts, just as the *advaitin* claims that, because of adjuncts, distinctions are introduced in the distinctionless. Priority and posteriority for time would be due to the priority and posteriority of the adjuncts. But how are the adjuncts distinguished as prior or posterior? Because of time; and because of the adjuncts so determined time itself is to be characterised as prior or posterior; a clear case of self-dependence. If time were not the determinant of sequence among adjuncts, all of them would be simultaneous, making all empirical usage impossible. This very impossibility would be a ground for treating time and cause as phenomenal, not for admitting sequence among adjuncts and claiming at the same time that it is not temporally determined. This is only to recognise under another name, time as a distinct adjunct determinative of

sequence; and one of the two postulates, either this adjunct or time, is clearly superfluous. Even were differentiation by adjuncts possible, it could not be said that time qualified by one of these exists in another time differently qualified, since in any case time cannot exist *in* itself. We do not indeed say that Devadatta who wears glasses exists *in* Devadatta who wears a suit.

This kind of difficulty may not appeal to those who refuse to recognise general causes. Even these will realise that invariable antecedence in time is over-pervasive of symptoms and co-effects, which are not causes. Day is not the cause of night. A persistent low temperature symptomatic of tuberculosis is not the cause of the patient's subsequent decline. We have to introduce further refinements in our understanding of invariable antecedence; and we seem nowhere near success in doing this. We may thus seek to dismiss symptoms and co-effects on the ground of their being *anyathāsiddha,* like the donkey or like the all-pervasive ether. The donkey's presence where the pot is made is due to other causes. Neither its presence nor the cognition of its presence is linked up *as a cause* with the cognition of the pot. Given its own causes the presence of the donkey would be fully accounted for, without any reference to the production of pot. So too in the case of ether, its presence is inevitable because of its pervasiveness, not because it accounts for the pot-production. Similarly the day is the effect of the rotation of the earth round the sun; it may be invariably associated in our minds with night, but its presence and cognition are adequately accounted for by its own cause without reference to night; so also the low persistent fever is accounted for by the tubercle bacillus without a necessary reference to the subsequent decline. Thus co-effects and symptoms may be ruled out.

But, we ask, do you mean to rule out all conditions that are accounted for by their own causes or are inevitable? In that case you would be ruling out most if not all accepted causes. The pervasive

ether is admitted to be the cause of sound, and the pervasive self of happiness, etc. It may be you are not prepared to admit their pervasiveness and *anyathāsiddhatva.* The difficulty, however, persists in the case of admitted causes. The clay and the wheel and the staff are undoubted causes of the pot. Are not these causal conditions sufficiently accounted for in their turn by their own antecedents? Perhaps, you think, they are not fully accounted for without reference to their purpose, the production of the pot, their final cause. There are at least two difficulties in such a view. You as a conscious being may consider the lack of final purpose to be a defect and may be inclined to read it in whatever you cognise; but that of itself will be no justification for reading this purpose into inert objects and determining their causality or non-causality thereby. Further this purpose is not an antecedent in time, but what is to be fulfilled in time, while what we seek to do here is to clear up the notion of an invariable antecedent. Again, what is it that we try to understand? Is it not the causality of clay, wheel etc., in relation to pot? The notion of pot as the final cause of the wheel, etc., how does that help us in this? In any case, it is difficult to maintain that clay is not understandable except with reference to a pot to be produced. It may be where it is by accident or design; and the design may relate to pots or dolls or a nature-cure plaster. The antecedents of its presence can be definite, not the purposes which it may serve; and because of the definiteness of the former, it does not cease to be a cause of pot etc. Of course, clay present in a potter's house is different from clay in Mahatma Gandhi's. In the former case, its causality of pot or basin is exceedingly likely; but it is only likely; the probability approximates to certainty when you see it in the potter's hands; even then there is an element of uncertainty; he may change his mind and throw it away or fashion something else; the certainty is greater when a rough shape has been given and you watch it on the wheel; it is

greatest when the pot has been finished; you can then say the clay of the pot is the cause of the pot, a proposition perilously near tautology. Again, in the case of earth, water, light, and seed, each of which is accounted for by its own causes and is known without a necessary reference to the growth of crops, can the causality in respect of crops be denied? The notion of *ananyathāsiddhatva* turns out to be a frail reed incapable of sustaining the causal concept.

You may now demand of the alleged cause that it should be helpful in producing the effect. But wherein lies helpfulness? And what degree of it is required? In any particular case of pot the donkey may be helpful; from contemplating its utility the potter may have derived extra cheerfulness and succeeded in finishing off a better pot than usual. This extra psychical stimulus may be provided by different causes for different pots; the potter may dream of his wife or his gains; though because of variability no one of these can be the cause of pot in general, causality in respect of each particular pot seems difficult, if not impossible, to deny.

Assuming for a moment all such objections to be fanciful, let us see whether there is any definite way of understanding the helpfulness of the cause. It is not that the effect is invariably present where the cause is; for the presence of seed is not invariably attended by the shoot. Of course, it will be said, seed alone is not the cause, but seed together with accessories. But it is in determining these accessories that we have all the trouble just noted; the donkey and the potter's wife are clamant in their demand for inclusion though with a show of logic we insist on excluding them. The only legitimate ground for their exclusion is that though present they are not present as causal. Our difficulty however is just what constitutes causal presence and it is no help to refer to accessories with a need for excluding what are not causal.

In any case, it is clear that the semi-popular usage of 'cause' has to be abandoned; for this can produce the effect only in dependence on auxiliaries; and those auxiliaries do, properly speaking, enter into the very cause of the effect in question. We cannot legitimately separate the alleged cause from the auxiliaries; and any attempt to include them seems to end only when we come right down to the effect itself.

It may be said that nothing can be simpler than to determine the true auxiliaries, on the ground of co-presence and co-absence, *anvaya* and *vyatireka*. Whatever has this generic quality is a cause, not any other. There are some merely technical objections to such a view; e.g. a genus, since it cannot possess another genus, can never be a cause. Since clay which is co-present and co-absent with pot has the genus substance-ness and this is shared by donkey etc., these too would be causes. If this genus be considered too wide and remote and a narrower more proximate genus insisted on, e.g. clayiness or earthiness, then such non-distinctive causes as ether, time, space etc., would be wholly excluded from the causal category, whereas time and space are always conceded to be causes. This is also the reason for our failure to understand *anvaya* and *vyatireka*. Is the co-presence in time, or space, or both? In the first case, time cannot be a cause since it is not present in time; in the second case, space cannot be a cause; and the since neither is present in *both* space and time, neither can be a cause in the third case. Nor is the difficulty merely fanciful or terminological. For no cause is such in the abstract, but only as occurring in certain spatial and temporal conditions; and these cannot be ignored in reckoning causal efficiency; rains at harvest-time cannot be the cause of plenty.

We have still to face the ancient bugbear known as plurality of causes. Fire may be caused by a match-stick, or a burning-glass or by a steel and tinder. No one of these is the invariable antecedent of fire, yet each is said to cause fire. Our logicians in their wisdom say such usage is due to ignorance and lack of analysis.

Where the alleged cause and effect are sufficiently refined by analysis it will be found the same cause has only the same effect and the same effect has the same cause. Where the fire in the oven has been lit by one of these alternative modes, what, one wonders, will the analysis of the effect lead us to? Our perception does not acquaint us with any difference in the fires. It may be said that if we look at the fires armed with the knowledge of their causes, we are enabled to distinguish the products too. In a class of young boys not old enough to be invested with the sacred thread and all looking more or less alike we distinguish a brahmin boy by his parentage from the rest; so too in the case of the fires and other similar effects alleged to result from a plurality of causes. The illustration is not suitable. For reasons, sound and unsound, we admit the brahmin parentage of the particular boy and then deduce or admit his brahminhood. Here, however, which is the cause is the very point at issue; and the matter we say is unsettled, because of the inconstancy of the antecedents of fire at different times. To the reply that the fires too are different we oppose their practical indistinguishability. It is no answer to this to offer their distinguishability in the light of their distinct causes. Granted their causality the effects would be distinguishable; granted the distinguishability the alleged causes would be really such: thus we have flagrant reciprocal dependence.

Nor is this due to the apparent puerility of the instance chosen. Though death, in popular speech, may be due to many causes, any particular instance of death will on analysis prove traceable only to one of such causes. Interference with the respiratory system is not the same as interference with the circulatory system. Drowning interferes with respiration; certain varieties of snake poison clot the blood and arrest circulation. Both are vital functions. The arrest of one leads to the suspension of the other also, resulting in what we call death. In respect of the final cessation of all functions, is there

any difference? None we can discover. In the preliminaries there-to there are differences: one may get black in the face, or have the wind-pipe or spinal column broken, or the respiratory passage filled with water, or one's blood-vessels choked up with clotted blood; but this is just what we too affirm; in the face of such divergent antecedents how can we deny plurality of causes or affirm a distinction in the effects, except at the risk of such tautologies, as "Drowning is the cause of death by drowning"? Analysis is a good servant, but a bad master. The man in the street does not analyse and has perhaps little faith in the infallibility of causal relations; the logically trained person analyses, but that does not justify his pathetic faith in the perfect causal relation; if the process of analysis is pressed forward rigorously instead of being allowed to stop short to contemplate its triumphs, it will find itself under the necessity to transcend the causal concept.

Again, since, where we do not arrive at a non-difference of cause from effect, we have to distinguish between the cause and its auxiliaries, may we not, even on the assumption of effects being distinguishable, attribute the distinctness to the auxiliary rather than to the cause? Drowning and shooting are both causes of death, we may say; there is no doubt of this difference in the effects, that there is water in the respiratory passages in one case and a hole through the heart in the other; but this is due to the mode in which the different causes function to their accessories; it cannot detract from the possibility of different causes to produce the same effect. Not a very sound argument, perhaps, but a plausible one.

Our difficulties, it may be thought, are due to the persistence of the popular notion that the cause is a single condition, whereas it is in truth a complex of conditions. We should not confuse ourselves with the notion of a cause and its auxiliaries, but should always envisage a causal complex, any member of which may figuratively, and for strictly limited purposes, be called a cause. A cause

is that which is a member of a causal complex. This does not, however, take us very far, since, as we have already seen, our difficulty is to determine how much to include in this complex and what to exclude. The only answer we get is that we should include all causes and only causes; but this is to go round in a circle. Further, being a member of the complex, is it the very nature (*svarūpa*) of each of the components? Then each should produce the effect. Even if aggregation be not the *svarūpa* it may be eternal; in such a case the effect should be constant, instead of appearing and disappearing. If, however, the aggregation is adventitious and occasional, how does *that* come about? If it is due to another cause, that will involve another complex and we shall have an infinite regress; or our notion of the first complex would itself turn out to be defective because of the non-inclusion of this factor which accounts for its own being. And when this cause of the complex can itself explain the effect, why postulate an intermediate complex? The complex should be accounted for by its own constituents. Is each then distributively the cause? Then, since some one element of it, e.g. space, will be constant, the complex should be constant, and also the effect. If to avoid this we say that the factors collectively account for the aggregation, we are in the old round of explaining collectiveness by itself. To postulate another complex or aggregate of course leads to infinite regress.

Why all this difficulty about aggregation? All conditions that are proximate constitute the complex; what is remote does not enter into it. The matter is not so simple, as we have difficulties parallel to those in understanding co-presence and co-absence. If the proximity be in time alone or space alone, time would be excluded in the former case and space in the latter; proximity in both would exclude both from causal conditions. If you mean not such contiguity, but either conjunction or inherence of one condition or set of conditions in the other or others, then conjunction and inherence would

not be causes, since for them there is not another conjunction or inherence. That there is a single complex may be determined from the production of a single effect; but this is to beg the question as to what it is that produces the effect.

Our troubles have been due to conceiving cause statically. The factors not merely exist but also function in producing the effect. This functioning (*vyāpāra*) we call aggregation or complication; and the effect results therefrom. We are still in the woods; for is this functioning extrinsic or intrinsic to the factors? If intrinsic, we have to determine whether it belongs to each factor distributively or to all collectively. In the former case we have the old difficulty that some factors being constant, the operation and the effect would also be constant. To conceive function as intrinsic to the aggregate does not help, since our present efforts are directed only to the understanding of aggregation. If the functioning be extrinsic to the factors, another functioning would have to be interposed between that and the factors, and there would be infinite regress. If, however, the function of complication can be arrived at without an intermediate function, why may not the factors produce the effect itself without the interposition even of complication?

When the conception of functioning fares thus, it is no help to define cause as that which has function. Other difficulties apart, this would exclude the final function from the cause, since that function has not another function. And since function cannot be defined except in terms of generating i.e. causing,[4] we are again involved in a vicious circle. Further, the possession of function cannot be interpreted as inherence or as generation. The latter involves self-dependence while the former is contrary to what is known. Sacrifice is said to be instrumental to heavenly enjoyment through the function of an unseen potency (*apūrva*); but this

4 The function is what is generated by the cause and generates the effect produced by the cause.

apūrva is not inherent in the sacrifice; for the sacrifice perishes while the *apūrva* survives and results in the enjoyment hereafter.

Enough of this juggling, you may say; it may be that I cannot define cause; but you cannot disprove it. For, living as we do in a world of finite particulars that come and go, the recognition of cause is inevitable; else there would be but constancy, neither appearance nor disappearance; what is uncaused is eternal, like ether or the self. The average realist who urges this is not quite aware of his own presuppositions. The Indian logician, for instance, holds that the non-existence of an effect prior to its production is uncaused; but it is not eternal, terminable as it is by the coming into being of the effect. Again, a barren woman's son is not caused; nor is he eternal. Even if you protest against this reference to non-entities, what are the positive instances on which you base your pervasion? Neither the existence nor the eternality of ether and the self is universally admitted. The rejection alike of eternality and of the absence of causation cannot avail as the ground of pervasion; for the materialist who admits all things to be transient yet denies the validity of inference or causation. One who delights in the bare bones of logic may attempt the following inference: What is in dispute is caused, since it has prior non-existence; what is uncaused has no prior non-existence, like the self; since the uncaused self is admitted by the vedāntins, and the present argument is addressed to them alone, the example is unquestionable. But there is a more fundamental defect; the *probandum* must be something known; it must not be a wholly unknown predicate or one whose nature is in doubt; it must not be *aprasiddha-viśeṣaṇa*. Since the causal concept is just that which is in dispute, it serves no purpose to set up an inference like the above to prove that something is caused.

Does the advaitin then deny causality altogether? No; he does deny its intelligibility and ultimate reality. Viewing ourselves and our environment as finite and changing, there is only one way

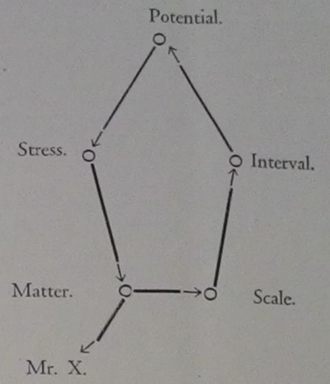
of rising above our limitations; that is to grasp the identity in the differences, the permanent in the changing. The causal concept is an eminently successful attempt at such apprehension. In the nature of things, however, it cannot claim to be more real than what it seeks to comprehend. The phenomenal world is illusory; the causal concept applicable thereto is also illusory. The causal relation is not ultimately real, because nothing we call cause is ultimately real. What causal explanation seeks is such identity of character between cause and effect as will secure rigid and predictable sequence; the reality of either is for it an irrelevant question. And logically there is no reason for us to insist that any cause or all causes alike should be real. In the first place, all causal factors are not alike; the potter's staff is little like the clay and less like the potter; why should such divergent conditions agree in a claim to reality? True, we call them all causes, just as we apply the notion of similarity to a variety of cases; but the similarity of cow to ox is not the same as that of a cow to she-buffalo; much less has it in common with the similarity of brother and sister. Why insist on reality being common to such widely divergent factors? Further, by him who says the cause is real, reality is presumably conceived as qualifying the cause. If the cause in every case is that which *has* reality for its qualification, then the substrate (*viśeṣya*), the cause, itself is not real; if, on the contrary, the cause does not have reality for its qualification, then too it is not real. Nor can this dialectical skill be turned against the advaitin. It may not be said for instance that if Brahman be qualified by reality, the substrate of the world would be unreal, and that the same consequence follows, only more so, if Brahman be not qualified by reality. For the advaitin holds Brahman to be reality itself, above all distinctions of substrate and attribute. Brahman is co-eval with *sattva*, not *antarbhāvitasattva;* and such a claim may intelligibly be made only for what is one, infinite, above space and time, not for the multiple and the limited.

It would follow from this that explanations of the finite as finite would achieve but limited success where they do not wholly fail. For the finite is grounded in the infinite and the latter alone can explain itself or another. Scientific explanations could take us beyond the particular phenomena sought to be known, but not very far; since our particular interests are limited they may and do offer help to satisfy those interests; but if we pressed forward, either because of irrepressible theoretical or satiated and novelty-seeking practical quests, we would find our explanations melting into thin air or doubling back to the starting point. Such an expectation on the part of the advaitin is justified in a measure by what some modern scientists have to say. The name of Eddington is notorious in this connection. And in spite of the disagreement even of some professors of philosophy, it is worth while taking note of his conclusions.

"The determination of the physical laws," says Eddington, "reflects the determinism of the method of inference."[5] And the mode of inference he exhibits as strictly cyclic, maintaining its rigidity by cutting away what inconveniently refuses to fit into the scheme. Thus Einstein in his statement of the law of gravitation makes use of the concept of *potentials* which are said to "obey certain lengthy differential equations." *Potentials* are quantities derivable from fundamental quantities called *intervals*. *Intervals* are relations between events measurable by a *scale* or *clock*. A *scale* is a graduated strip of *matter*. Keeping to the world of mechanics, matter may be defined in terms of *mass*, *momentum* and *stress*. To the question what these three are, Einstein's theory is claimed to have given an exact answer. "They are formidable looking expressions containing the *potentials* and their first and second derivatives

5 *The Nature of Physical World* (Everyman), p. 262.

with respect to the coordinates."[6] And thus we have gone round full circle, or as Eddington diagrammatically represents it, round the pentagon.



The only way to avoid this going round is to stop short somewhere with what you know or what you seem to know. Most people would imagine they know what matter is and would not question further. For them, scientific explanation would appear very sound, simplifying and inter-connecting concepts, making the whole world more intelligible. But the knower, who is he? What is Mr. X? Surely till that is answered the explanation is not complete. It is because of ignoring this question that systems are maintained and certainty achieved. But neither the metaphysician nor even the scientist has the right to ignore this question.

The cyclic nature of physical inference is illustrated by the children's rhyme of the house that Jack built; only at a certain stage we retrace our steps instead of going on, so that we repeat ourselves indefinitely.[7] And the fact of empirical validity of what we infer

6 *Op. cit.*, p. 254.

7 Or, as another interprets it "We are doing what the dictionary compiler did when he defined a violin as a small violoncello and a violoncello as a large violin" (*Limitations of Science*, p. 193, Pelican).

cannot guarantee the objective reality of the starting point of the inference. "When from an observation of pink rats we infer the presence of alcohol, the validity of the inference lies in the fact that what we infer originates a process which ends in the mental construction of pink rats.....But it is not presupposed that the pink rats are objectively real."[8]

Eddington holds that with the advent of quantum physics, the decline of determinism has also set in. The strict reign of *causality* (the belief in rigid reversible causal relations, as distinguished from the belief in *causation* that any consequent is due to its antecedent or complex of antecedents) is no longer found valid in the domain of physics where it had been supposed to hold undisputed sway. Not all modern physicists are willing to sacrifice determinism. But causality is a positive idea, the burden of proof of which lies on those who advance it; and physicists like Einstein and Max Planck, though they would like to re-establish determinism, see no present means of doing it. Their present failure does not involve failure for all time. Strict causality has not been disproved. But this can give no satisfaction to the physicist whose task it is to prove it, if he can. And despite Planck's emphatic assertion that "natural phenomena invariably occur according to the rigid sequence of cause and effect. This is the indispensable postulate of all scientific research,"[9] we have Eddington's assurance that "Present day physics is simply indifferent to it. We might believe in it today and disbelieve in it to-morrow; not a symbol in the modern text-books of physics would be altered."[10]

If the reaction to determinism among modern physicists is not uniform, the welcome among philosophers has not been all that one might expect. Prof. Stebbing re-acting violently against the idealism as well as the loose language of Eddington will concede only

8 *New Pathways in Science*, p. 294.
9 *Where is Science Going?* p. 107.
10 *New Pathways*, p. 302.

that "the discovery of uncertainty relations does involve a considerable change in our attitude to determinism. But I doubt whether it is quite the change that either Jeans or Eddington supposes."[11] "The dominance of universal causation is felt to be a nightmare. Heisenberg's principle has some part to play in revealing to us what it is we thought we were accepting."[12] A very limited concession! Radhakrishnan holds that "Even freedom of man is not helped in any way by the freaks within the atom. To suggest that electrons possess free will is to degrade freedom itself."[13] "If in order to be satisfied of the truth of freedom" says Dr. Brahma, "we want it to be proved at the level of mechanism, if instead of rising up to the level of freedom we desire that it may exist at the lower level of mechanism, we are demanding what is nothing short of the impossible. Freedom is not determinism and it can never hold good of determinism."[14] The meaning of this last statement is far from clear, especially in view of what he says later. "The freedom that cannot find any place for necessity and causation but always opposes itself to the latter cannot be the ultimate category."[15] Should we not conclude from this that "real" freedom does not oppose itself to determinism and, to that extent, does hold good of determinism? Dr. Brahma is quite content with the indeterminism or non-determination of Brahman; at the level of the phenomenal or empirical, causation may have full sway. But this is just what we as humble logicians in quest of the truth fail to understand. Quite irrespective of what may be true of a transcendent or noumenal background, we found it difficult to grasp the notion of cause or effect in any intelligible or consistent fashion even at the empirical level. We found that try as we might we were landed in self-dependence or infinite regress, defects which strangely enough seemed to find a parallel in

11 *Philosophy and the Physicists*, p. 184.
12 *Ibid.*, p. 240.
13 *An Idealist View of Life*, p. 246.
14 *Causality and Science*, p. 20.
15 *Ibid.*, p. 22.

physical laws as expounded by Eddington. The cyclic nature of physical law exhibits the self-dependence we have detected in the causal notion. And the scientist today recognises, instead of rejecting, the plurality of causes. "We may think" says Eddington "we have an intuition that the same cause cannot have two alternative effects; but we do not claim any intuition that the same effect may not spring from two alternative causes."[16] And the following quotation from Prof. Davidson will serve as a commentary on this: "The scientific world is full of examples of the same effect proceeding from different causes. An instance from chemistry may be taken. It is well known that formic acid can be obtained from nettles, ants, and other living organisms. It can also be obtained from its elements by simple methods; for instance, potassium formate can be produced from carbon monoxide and caustic potash, and formic acid can be produced from the compound by distilling with dilute sulphuric acid."[17] This measure of agreement makes us suspect that there may be more to the matter than is conceded by Prof. Stebbing or other philosophers, realist or idealist.

Let us consider for a moment the measure of indeterminism now claimed to the credit of the sciences. Each atom is supposed to comprise a nucleus of positive electricity with one or more electrons revolving round it. The nucleus may consist of a single proton or a number of protons and electrons closely packed together, with a preponderance of protons over electrons so that there is a balance of positive electricity. The electron revolving in its orbit should naturally tend to draw ever closer to the nucleus and the process would be normally presumed to be continuous. It has been found, however, that what occurs is a change by jumps, not a continuous change. We have to assume a succession of orbits; from each of these the electron may jump to a higher or a lower, either absorbing

16 *Nature of the Physical World*, p. 286.

17 M. Davidson, *Free-Will or Determinism*, p. 44.

energy or radiating it; it may jump to the next lower or to the next but two; when the electron will jump and how much it will jump we do not know and have no means of knowing; all that we do know for certain is that between the energy levels of the various orbits the relation is constant, being expressible in terms of h (Max Planck's constant, equivalent to $6{\cdot}55 \times 10^{-27}$ erg. seconds) or some integral multiple of h, such as $2h$, $3h$, etc. There is thus an uncertainty within the atom, what Radhakrishnan calls a freak, as to when and how its mobile components, the electrons will change; the time, the quantity and direction of change are all uncertain.

This much can afford little basis for the scientific determinist or indeterminist philosopher. The measurements required may appear present impossibilities but may be future achievements, even like the bombing and disintegration of atoms. To this extent one may sympathise with Dr. Brahma when he says "If future experiments reveal to us that the indeterminism supposed to exist in the movements of the electron is really non-existent, Philosophy would find itself helpless to prove its position if it now accepts the argument of Professor Eddington."[18] But the arguments of Eddington and Schrödinger go a little further than this. They maintain not merely that the movement of the electron is uncertain in the present state of our knowledge, but *can never be certain*, so that scientific prediction, such as we used to believe in, is impossible. In order to foretell the motion of the electron you must know both its position and its velocity; but in the nature of things, you can never approach accuracy in regard to the one without receding from accuracy in regard to the other. In order to know the position of the electron you have to look at it or illuminate it with light rays of a smaller wave-length; not even the shortest of ordinary light rays, the violet rays, is short enough for the purpose. We have to use what are called gamma-rays from radio-active substances. When such rays

18 *Op. cit.*, p. 20.

are used, at least one quantum of energy will be involved and this is sufficient to disturb the electron, in an unpredictable manner. We would have very nearly fixed the position but would have disturbed the velocity. If we used lights of long wave-length but little energy, the velocity would be undisturbed, but the position would be uncertain. Accurate prediction requires knowledge of both position and velocity. "But these two factors are so connected that the more accurately we know the one the less accurately we know the other."[19] To put it in terms of Schrödinger's wave-theory, an electron may be taken to be associated with a wave-packet so as to correspond to it in some way. Wave-packets may comprise waves of great or small length. In the former case their velocity will be less than in the latter. The velocity of the electron in the larger wave will be not quite determinate, as it may be either in the forward moving or back-ward moving part of the wave; but since the velocity of the wave itself is low, the indeterminacy will be low compared with the indeterminacy of position due to the length of the wave; the latter indeterminacy is reduced in the case of waves of shorter wave-length; but because of their greater frequency the difference in velocity between the forward and backward parts will be much greater; hence the indeterminacy of velocity is much higher in this case. "We pay for precision in position by uncertainty in velocity and *vice versa*."[20] The difficulty, to repeat, is not one of present inability, but the impossibility of prediction, given present conceptions.

It may be urged that these conceptions may give place to others, in the light of which prediction may appear possible. The wave theory gave way to the particle theory; now there is a tendency to combine the two and speak of a wavicle; we may in time arrive at some more intelligible synthesis which will do justice to the phenomena and preserve determinism. As against this we have to re-

19 *Limitations of Science*, p. 92.

20 *Ibid.*, p. 93.

member that Eddington and those of his persuasion do not claim to have established indeterminism scientifically. They do claim to have dis-established scientific determinism. Strict causality as understood in the past is neither possible nor necessary for science. We have so far only probability based on statistical laws. These statistical laws are not and need not be grounded on a rigid reversible causal relation.

We may assume for the moment that the principle of indeterminacy (strictly speaking it is uncertainty, and is expressive of the inability of the observer, not of the nature of things) has been established. Even thus, it holds of microscopic bodies, not of macroscopic entities like ourselves or our bodies. Granted the electron is free, what follows for us, endowed with organisms composed of large masses of electrons? The governing law may be statistical in its nature, not a relation of rigid necessity. This, however, means little in practice. By extensive observation we may compute the average longevity of the members of a country, community, profession or the like. It will not be possible on the basis of this average to judge the longevity of any particular member of that group; any particular member's length of life may hover about the mean or be far in excess or defect. Despite such uncertainties and aberrations, the average will continue to hold good for the whole as such. Similarly whatever may be the indeterminacy of the individual electron, the general law of causality will continue to hold good of us who are wholes of electrons. Microscopic uncertainties cannot detract from macroscopic certainty. The supposed freakishness within the atom is no guarantee of my freedom.

The argument thus advanced seems irrefutable. And the advaitin, who is interested not in the empirical, but in the transcendental, ideality of the concept, may well be disposed to accept the argument at its face value. He cannot, however, afford to forget that his own dialectic has convicted the causal concept of self-

dependence, reciprocal dependence and so on. The cloven hoof (ideality) would seem to be manifest, however dimly, even at the empirical stage. The philosophic advocate of non-difference cannot afford to recognise water-tight planes or compartments, such that causality is wholly real in one plane and wholly unreal in another. It is in truth neither real nor unreal; this indeterminability (*anirvācyatva*) is manifest in varying degrees in various planes. The advaitin cannot, therefore, countenance scientific determinism as either actual or possible.

It seems likely that the insurance company analogy is responsible for a confusion. The promoter of such a company, if he accepts reliable statistical figures about longevity, gets the advice of a good actuary, and permits no swindling by himself or by others, is exceedingly likely to prosper in his business despite the uncertainty of any individual's death or survival. In such a case, however, the group or class has no individuality of its own. It is loosely knit; if some die early, others die late and there is a balancing which preserves the average age intact. Suppose we consider instead something like the behaviour of a crowd and the behaviour of a company of soldiers. In the latter case, we can predict for the whole, not in spite of uncertainty about the parts, but because there is no uncertainty about them. In the former case, we may be certain about the parts but uncertain about the whole; while each member of a crowd may be inoffensive, whether because of timidity or a genuine law-abiding nature, the crowd as a whole will often over-ride both tendencies and behave in a thoroughly disgraceful manner. The difference between the insurance statistician and the collective psychologist is that the former studies happenings, while the latter studies behaviour. "Collective security" is possible in the former case in a manner and to an extent impossible in the latter. This is because in *behaviour* as contrasted with *event*, we have to deal not merely with particulars, but with

units or individuals; and each unit or individual seems to exhibit distressing symptoms of uncertainty.[21] This is of course most so in the case of the units called individual selves, as is evident from our deliberation as to what we shall do, our regrets for what we did or failed to do and so on. This, however, is to anticipate the question of human freedom.

To return to scientific determinism, it may be argued that with the possible exception of psychology, science is interested in happenings as such, not behaviour, and that if statistical laws can make predictions in those fields, the needs of determinism will be satisfied therewith. This sounds reasonable enough. But let us examine the nature of statistical law. It is based on a number of observations presumably accurate and formulated in such a way as to hold good of the whole constituted of the individuals observed. The proposition "Early marriages produce weaklings" based on observation of A, B, C.....Z, who are all progeny of early marriage, is an instance of such a law; again, the proposition "South Indians generally die at 50," based on numerous observations as to the incidence of mortality in a large number of South Indians in all walks of life, is a statistical law. In neither case has a necessary connection been established between cause and effect or antecedent and consequent. But the observations so far as they went, were accurate. There was no doubt of A-Z having been children of parents married early or their being weaklings; the individual South Indians observed did die at the various ages noted by the observer. There is some basis of accuracy to go upon. If similar accuracy were attainable in the case of at least some of these microscopic electrons, we might formulate a statistical law holding good of the

[21] After I had completed the paper I came across the following lines in Eddington's latest book: "A study of mob-psychology would be a very unsatisfactory foundation for a theory of the human mind. The molar law, or mob-law, of physics is an equally unsatisfactory introduction to the theory of individual or atomic behaviour." *The Philosophy of Physical Science*, p. 30.

macroscopic body though not of any individual microscopic component. This possibility, however, is just what is denied by the Principle of Indeterminacy which says that position and velocity cannot both be accurately determined. And though from a large number of non-accurate observations one may make a guess to a future event, the prediction can never on this basis achieve any better status than that of a guess, more or less lucky.

We may be faced now with the proposition that what is statistically aimed at is a law that applies to microscopic bodies, not to macroscopic ones; with regard to these, there is neither doubt nor failure of the application of the causal law as ordinarily understood. Even on this position there are certain difficulties. What we know as statistical law is such not because its basis is inaccurate, but because though accurate as far as it goes it does not make room for analysis and the establishment of a rigid connection; with the microscopic bodies, however, we find, if Heisenberg is not mistaken, that our observations are and necessarily must remain inaccurate. Statistics deal with inadequate data while here we are faced with inaccurate data. The difference, we grant, is one of degree; this, however, is as little ground for ignoring it, as the tiny size of the baby for ignoring its illegitimacy (in Marryat's story). Secondly, we have to ask whether these microscopic entities occupy a region of their own or are constitutive of the macroscopic bodies supposed to be governed by rigid causality. If they are constitutive, what is the guarantee that the uncertainty of microscopic behaviour will not affect the macroscopic too?[22] It would be ridiculous of course to argue that the larger the whole the greater is the indeterminacy; for the uncertainties may cancel out one another. But is the cancelling out more than a probability? Strictly speaking, should we not say that we cannot be certain as to whether the microscopic uncertainties

22 *Cp.* "If, however, the components acted quite capriciously why should there be aggregate constancy?" Laird, *Recent Philosophy*, p. 165.

accumulate or are annulled? And whatever we may judge of *events* as such, should not this uncertainty be our most legitimate conclusion with regard to *behaviour*?

All this seems much at variance with common sense. In looking back on what we know of occurrences or behaviour, we fail to see how any event could have occurred or failed to occur otherwise than as it did. In retrospect at least there seems to be no uncertainty. But this is no problem for the advocate of indeterminacy. In stating the principle, this is how Eddington envisages and answers the difficulty: "There is no limit to the accuracy with which we may know the position, provided that we do not want to know the velocity also. Very well; let us make a highly accurate determination of position now, and after waiting a moment make another highly accurate determination of position. Comparing the two accurate positions we compute the accurate velocity—and snap our fingers against at the principle of indeterminacy. This velocity however, is of no use for prediction, because in making the second accurate determination of position we have roughhandled the particle so much that it no longer has the velocity we calculated. *It is a purely retrospective* velocity."[23] "Nature thus provides that knowledge of one half of the world will ensure ignorance of the other half, ignorance, which, as we have seen, may be remedied later when the same part of the world is contemplated retrospectively."[24] "It is easy to prophesy after the event."[25]

Between the Eddington picture of the indeterminacy in the atom and our average picture of human indeterminacy there is a close

23 *Nature of the Physical World*, p. 295. 24 *Ibid.*, p. 296.
25 *Ibid.*, p. 296. It will be interesting to consider here what we know of astrology. It is a matter of common experience among those who consult astrologers that any astrologer worth the name shows uncanny ability in predicting the past while his success as to the future is much more restricted. He may succeed in forecasting certain outstanding events; but the minuteness and accuracy characteristic of the prediction of the past are generally lacking in the prediction

parallel. Most of us feel that, after we have acted, the speculation if we could have done otherwise is idle; but before acting we do feel that there is a choice to be made and that much hangs on this choice. Retrospectively we do admit determinism, but not prospectively. And if a serious-minded scientist finds a parallel for this in intra-atomic behaviour, there is little need for us to look with scorn at "freaks within the atom." Any such parallel is bound to be interesting and illuminating, though, of course, never conclusive. And it is not the claim of the Eddington group to have proved human freedom; rather do they maintain that the supposed obstacle of the exact sciences is no longer there.

It may be thought that the claim to exactitude of certain sciences was never a bar to human freedom. The determinism of external events cannot affect the fact of human responsibility. Prof. Stebbing makes a distinction between responsibility *for* and responsibility *to*. I am responsible *for* my acts *to* some authority, God or the king or my neighbours. When a question of accountability or responsibility *to* some one arises, it may be legitimate to plead determinism as an excuse. But so long as I do not ignore the fact that whatever is done it is *I* that do it, my responsibility *for* the act persists and cannot be got rid of. The notion of responsibility *to*

of the future. This may be due in many cases to the astrologer's lack of competence; in some cases it is due to inaccuracy of data, the required precision being almost unattainable in the nature of things; to some extent again the lack of accuracy is due to the possible modification of the future by the individual himself; he may offer propitiations and avert malign influences; the planets seem to be responsible only for some tendencies, the effectuation or frustration of such tendencies being, to some extent at least, in the hands of the victim. It is indeed urged that the function of astrology is not to satisfy idle curiosity about the future, but to help the individual to forward good tendencies and avert evil ones, by suitable measures. It is also common belief that astrological predictions of the future fail in the case of yogins, because of their intensive self-culture. However this may be, we find that astrology combines precision as regards the past with a haziness more or less negligible as regards the future; and this combination instead of disentitling it to be a science, seems to bring it into line with other exact science, in its modern developments.

is irrelevant; what matters is responsibility *for* and this does not stand in need of scientific indeterminism. What matters is that *I* act; and our interest should lie in making precise the *I*, not in making the act indeterminate.

One may sympathise with this clever line of reasoning without, however, being convinced by it. The question of responsibility to God may be irrelevant, but that of responsibility to society and the state is very important. If a person's acts are the result not of choice, but of prior states and those of still prior states and so on, are we justified in intervening at some stage awarding praise or blame, reward or punishment? On such an extremely determinist view even our approbation and reprobation would appear determined; so the question of justification may not arise. But even in regard to responsibility *for*, surely there is a difference between a primary and a secondary sense thereof. I am responsible for my fall, physical or moral, in a way in which the stone is not responsible for falling. If my responsibility consists in this, that it is *I* who act, the stone should be responsible in precisely a similar manner in that it is the *stone* which falls. This however is not what we mean. With regard to this very falling of the stone, both I and the stone may be responsible, I by the fact of displacing it and the stone by the act of falling, but in very different senses. The stone acts as it is acted on. I act because of the forces which act on me and as I choose among these forces. An abstract external calculation of forces, such as is possible or as is assumed to be possible in the case of the stone, is not possible in my case. That is why I am responsible in a sense in which the stone is not. To square this fact of responsibility with scientific determinism we have either to deny that fact or abrogate determinism. The former is what earlier scientists and the materialists did; the latter is what the Eddington group of scientists do.

A third course is perhaps not impossible. One such way would admit determinism in a limited sphere. Determinism is all right in

the world of matter, but will not apply to spirit. We are concerned, however, not with the freedom of spirit in the abstract, but with the freedom of human beings, apparently bound in and reacting to a material environment, and embodied in psycho-physical frames. If those frames and the environment are strictly determined, there is no sense in claiming freedom for me; my responsibility is no better than that of the falling stone. Am I different from the frame and the mechanism? If not, the determinism of the latter applies to me also. If I am different, in what realtion am I to the mechanism, and how is it determined? If there is a relation and that is undetermined we leave the door wide open for the influx of the demons of primitive faith; calculation and determinism, even within a limited sphere, become impossible since this sphere is liable to be disrupted at any time from without. If the relation is determined, it cannot obviously be so unless the other relatum, the *I* is also determined, and no determinate relation is conceivable where one relatum is undetermined and undeterminable. The only relation, if it can be called that is one of super-position of the mechanical on the non-mechanical, of matter on spirit. This is the advaita notion which we shall examine presently. But short of this there seems no way of avoiding the extremes of denying human responsibility or scientific determinism. To claim a mysterious sphere for the *I* is only to do violence to science without any corresponding advantage in metaphysics.

Why not then adopt the advaita doctrine of super-position? The mechanical, the material, the determined is a superimposition on the conscious, the spiritual, the ever-free. So long as we are in the sphere of the super-imposed we gladly concede determinism. We recognise however that it is only a phenomenal plane, the plane of the analytical intellect. When, by a deeper intuition, we rise to the higher plane of spirit, there is no determinism. The Real, the Absolute is neither free nor not-free; the appearance is never free.

The fetterless spirit appears as fettered in its own laws; the non-relational appears as the harmoniously related; the uncaused and uncausing appears as a system of rigidly interlinked causes and effects. "The Absolute" says Dr. Brahma "expresses itself differently at different stages and this infinite variety of expressions also in a way proves the infinitude of the Absolute. It is our limitation which is responsible for the belief that what is causally connected cannot be freely conceived. But if we attempt to reach the deepest levels of our experience and to be directly cognisant of the inexhaustible, autonomous spring that underlies and supports the ever-changing playful states of consciousness, we can realise that what is freely conceived is expressed through harmony, law and system, and that there is no opposition between perfect freedom and spontaniety on the one hand and law and system, causality and determinism on the other."[26]

This passage, I confess, has puzzled me greatly. In some ways its contention seems as patent as it is acceptable. How can the infinite appear finite, the self-luminous as other-illumined, the undetermined as determined? To this our answer must frankly be that as finite consciousnesses we do not know, and to deny the reconciliation is really to presume an omniscience we do not possess. The reconciliation *may be* for aught we know; it *must be* if we are to conserve the intelligibility of the finite in some measure; therefore it *is*. The adoption of this Bradleian reasoning, however, presupposes a *must be*: a stage which we cannot postulate if the finite causal system were a closed system, if determinism, causality, law, system were intelligible instead of being riddled with contradictions as shown in the Bradleian and advaita dialectic. We may admit that the ever-free can and does express itself as if bound; but if the freedom is real, the bondage can be nowhere near perfect.

26 *Op. cit.*, p. 22.

Another idea under-lying Dr. Brahma's words may perhaps be expressed thus. Brahman is undetermined; it is not a term in a cause-effect series; all the same it is not characterless; the undetermined nature of Brahman does not lead to the possibility of anything being anything else; the absolute freedom of Brahman is consistent with its being determinate, its being character (though not endowed with characteristics), so that what is abstracted therefrom or superposed thereon is such and such, not something else; and between the various super-positions certain definite laws hold good. This is as it should be. A thoughtful advaitin would repudiate the characterisation of Brahman, refuse to predicate characteristics thereof, but not say that it is characterless. It is that which is at the mercy of all outside influences that has no character; not, however, that which has no inside or outside and is homogeneous. If, therefore, it is this reconciliation that is meant by Dr. Brahma between law and its transcendence, there is no need to disagree.

But here again it must be remembered that the finite is not a plane or sphere apart from the infinite; it is the infinite itself which expresses itself in finitude; hence even on the empirical view the boundaries of the finite cannot afford to be hard and fast; they must have a certain haziness, though the haziness may be negligible when dealing with large numbers. What I wish to stress is this: what you call finite has or has not a hard crust; if *ex hypothesi* you endow it with such a crust you will never make it jump out of its skin into the infinite either now or ever; if on the contrary it has no such crust, but we treat it as if it had, then law, system, determinism are not absolute even in the empirical sphere. Surely this is the only legitimate conclusion, if the deeper intuition is not a *deus ex machina* but the fruition and fulfilment of the disciplined intellect itself. From such a point of view the postulation of indeterminism in science is a conclusion very much to be welcomed. Absolute certainty for the true advaitin, belongs to Brahman alone for

that alone is both determinate and undetermined. Anywhere short of that, what is claimed to be absolutely certain is only an exercise in tautology more or less successfully camouflaged.

Again, what can be meant by the statement that the "Absolute expresses itself differently at different stages"? Is it that distinctions of space and time have real significance for the Absolute? Does the Absolute really have to pass through various stages? Or is it that in the Absolute, which is one, *we* distinguish stages? Surely this last is the position acceptable to the advaitin. And on such a view, the non-reality of the stages and distinctions has to be admitted, despite their presentation and empirical reality. The admission of this much of reality may be a necessary stage even in the realisation of illusoriness. As the ancient advaitin asks:

"गौणमिथ्यात्मनोऽसत्त्वे पुत्रदेहादिबाधनात्
सद्ब्रह्मात्मा-हमिति एवं बोधि कार्यं कथं भवेत् ?"

But what we insist on is only the non-reality, not the unreality (*asattva*) of the empirically real. Even at a level far short of absolute realisation, we find that error has been the gateway to truth; this does not prevent the recognition of the error nor shift the realisation of the more inclusive truth to a higher plane or to a different sphere. The passage from error to truth may follow the laws of wave mechanics or of quantum mechanics. We may insensibly move towards the truth or jump to it in well-marked stages; and our jumps may not all be in a forward direction; however this may be, it can never be maintained that in one sphere or plane the error was true, but not in another. We thought it true at one stage, but now we do not think so; the germ of our present realisation was in it from the outset; it may be a fresh discovery, not a fresh importation; and consistently with this we have to declare not its reality, but its non-reality even in the empirical sphere. The deficiencies of empirical reality are to be made known not elsewhere or at another time in a

different order of experience; our finite practical life itself exhibits its self-diremptive character. What is required is not an ecstatic flight to mystic heights but some patient and persistent analysis. The Vedānta says "That thou art" not "That thou wilt become"; oneness with the Absolute is a present experience, not a mere hope of the future; and the imperfections of the phenomenal must be evident to us now, since we are the noumenon even now and do not have to become it hereafter. We cannot admit indeterminism in one plane and system, causality and law in another plane. Indeterminism is not indeterminateness; hence the *possibility of law* to a limited extent; system is relational, and relation being an unintelligible concept in the last resort, can never be complete; hence the possibility of law *only to a limited extent*. Freedom can hold good of determinism, despite Dr. Brahma's assurance to the contrary; it is because determinism can never be complete; in its attempt at fullness and precision it reaches out indefinitely or turns round in a tautologous circle. The self is free energising, as it is self-luminous consciousness. This freedom, however, being another name for the fullness of character independent of external conditions, and not equivalent to the indeterminable subjection to influences other than one-self, it is determinate. This determinateness is appreciable by us in our efforts at prediction, which are so successful in regard to the past and achieve a limited measure of success in regard to the future, though our certainty about the future is not and can never be anything more than a high measure of probability. For the ever-free in its appearance can never appear as the merely determined or the merely indeterminable; it must combine both features while rising above both; hence the predictability in retrospect and the probability in prospect. This is one approach to an understanding of reality and for help in this approach we may be duly thankful to modern scientists, though beyond this we may not go in reliance on their conclusions.

The dismissal of causality does not involve the abolition of all certainty. It is dreary philosophy which can hold out no certainty at least of release. This certainty cannot be taken away by advaita or by modern science. There is no philosophy possible without the certainty of the philosophising self. This is self-luminous, self-evident, self-guaranteed. And release, according to the advaitin, is the self's own nature. It is that it is; it can never be gained nor lost, though it may appear to be lost and appear to be regained. For us who appear to be searching, the regaining of our own nature is a certainty; it is indeed the only certainty, and the only measure among the probabilities which are all we have left to us in prospect.

S. S. Surya Narayana Sastri

The Life and Works of Madhva

I. *Predecessors of Madhva*

Nothing definite or authentic about the forerunners of Madhva's theism is known to us beyond what has been recorded by Nārāyaṇa Paṇḍitācārya, in his *Maṇimañjarī*, a short poem furnishing the necessary mytho-historical back-ground to his more elaborate "Life of Madhva" (*Madhvavijaya*). From this and from the evidence of Madhva's own works, it is clear that the system of the Ācārya claims its descent mainly from the ancient monotheism of the Ekānti-Vaiṣṇavas or the Bhāgavatas.[1] But for all practical purposes, Madhva is himself the first historical founder and exponent of the system of

FOREWORD

At the request of many friends for a guide to them in the preparation of wholesome, as well as tasty, meals, we are offering to the public this little booklet which, we feel, is of particular value at this time, when nourishing vegetarian food is daily in greater demand and even necessity.

We wish to call special attention to the Grain dishes which are the most important part of the Dietary and to the WHEAT dishes most definitely, reminding readers that the *whole grain wheat* contains every requirement for the nourishment of the human body and that every family should have this food several times weekly adding to it leafy or juicy secondary food; this will ensure its true welfare. No one, furthermore, be he infant, child, adult—worker or thinker, is truly nourished when he lacks the substance of the *entire wheat grain*, be it served as broth, gruel, or entree, etc.; this fact is peculiarly true for the Aryan Type.

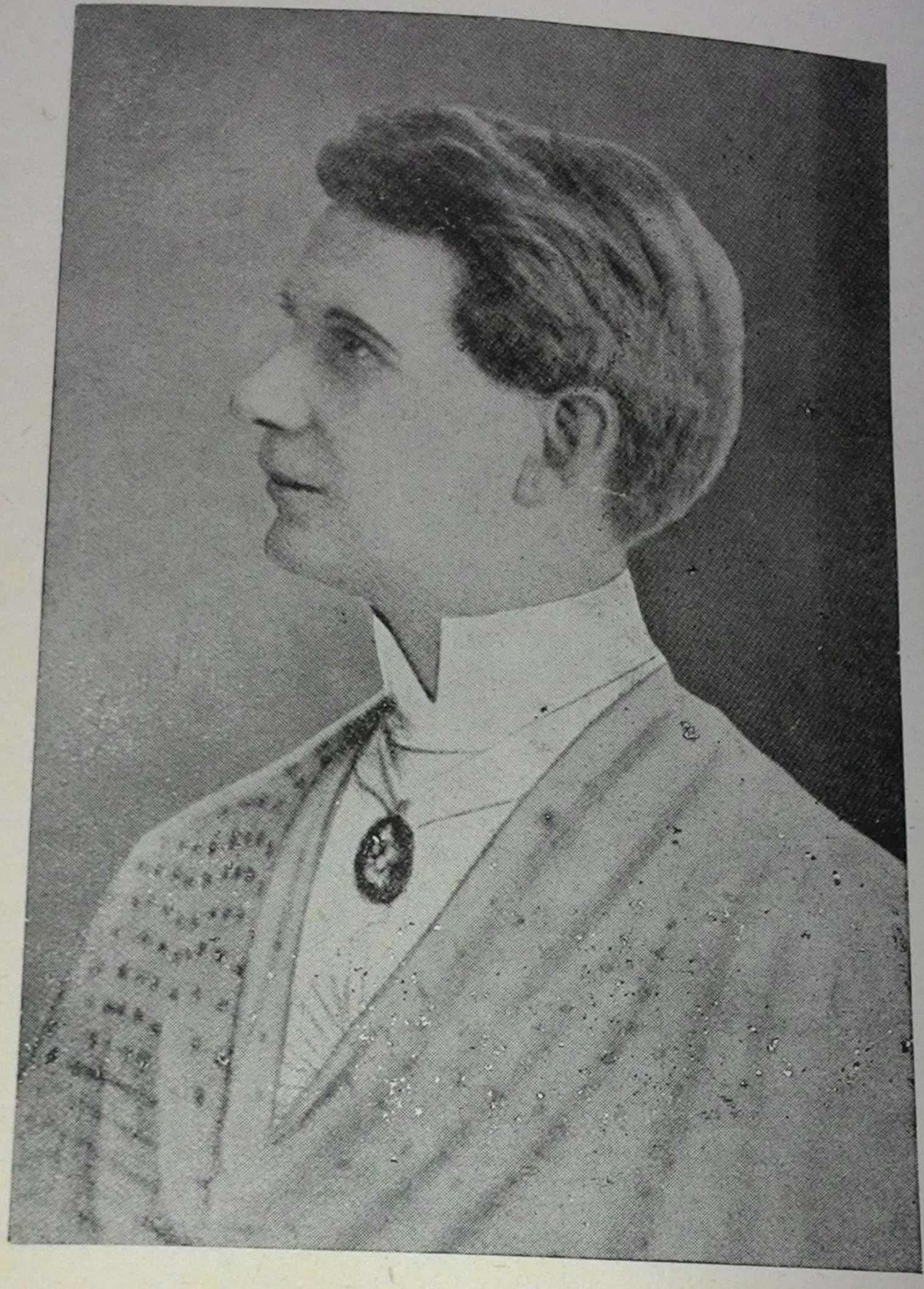
The preparation of these foods is found to be a light task and a pleasant one, which is particularly encouraging to many housewives in these days; through practice, other dishes in great variety will come to one's mind, but the simple, primary principles of the *combining* of foods, as herein stated and explained, must be mastered—then success is assured.

We should like every hotel and guest-house, school and catering place everywhere to make constant and free use of the information within these pages; we assure them their public will not only be pleased but well fed.

Nurses for children and for invalids will find invaluable recipes for the true and proper nourishing of those in their charge.

Our only desire is that the purpose of this little booklet shall find fulfilment in yielding satisfactory guidance toward an enjoyment of both health and the pleasure which good food can bring.

Mrs. Clarence Gasque,
Kashmir, 1942.



DR. O. Z. HANISH

MAZDAZNAN
DIETETICS AND COOKERY COURSE
According to: DR. O. Z. HANISH

FOOD COMBINATIONS
AT A GLANCE

A PRACTICAL knowledge of how to select, combine, and prepare foods is necessary to conduct a dietary system successfully. Just as certain acids induce corrosion when coming into contact with certain metals, so wrong combinations of food, most frequently the mixing of acidulous foods with foods of a mineral nature, cause an injurious fermentation in the digestives, which is inimical to a natural process of digestion and assimilation.

A convenient LIST OF FOODS is given below, together with such information as will enable one to make proper combinations of foods, and to avoid injurious combinations. No attempt is made to enumerate a complete list, but merely to classify for practical purposes such foods as are ordinarily procurable.

GRAINS

Wheat
Rye
Barley
Rice
Indian Corn
Oats
Buckwheat

Different kinds of Grains may be used together, and they may be combined with Vegetables *or* Fruits (but not with Vegetables *and* Fruits at the same meal), small Fruits, Nuts, and Dairy Foods.

PULSES
(Fertilisers)

Dried Beans
Dried Peas
Dried Lentils

Different kinds of Pulses may be used together, and they may be combined with Grains or Vegetables, Nuts and Dairy foods.

When on a Pulse Diet for fertilising purposes all other foods should be discarded except mushrooms, which are also fertilisers, and Green Vegetable Salads made with Lettuce and raw grated Beetroots, Turnips and Carrots. An abundance of this Salad should be used as an eliminator. Fresh sweet milk is also permissible.

VEGETABLES

Artichokes
Asparagus
Aubergines (*Egg plant, Brinjals*)
Beans (*Green*)
Beet-root
Broccoli
Brussel-sprouts
Cauliflower
Cabbage
Cardoons
Carrots
Celery
Chicory
Cress
Cucumbers
Dandelions
Endive
Garlic
Ground-Cherries
Horse-radish
Kale
Kohl-rabi
Leeks
Lentils (Green)
Lettuce
Marrow
Melons (Musk-, Water-, English-, Spanish-)
Mushrooms
Mustard (Green)
Okra (Lady Fingers)
Onions
Parsley
Parsnips
Peas (Green)
Potatoes
Pumpkins
Radishes
Rhubarb
Rutabagas
Salisfy (Oyster Plant)
Seakale
Sorrel
Spinach
Squash
Sweet-Corn

Different kinds of Vegetables may be used together, and they may be combined with Grains, Pulses, Small Fruits, Nuts, and Dairy foods; but they should never be used with Fruits at the same meal.

Onions are an exception to this rule, and they may be used with acidulous Fruits.

Garlic should only be used for flavouring, and as a medicine.

Horse-radish may be used as a savoury, and also medicinally.

Use no water with Vegetables except in the preparation of soups and broths.

Cooked Vegetables should be prepared with Savoury Herbs.

Sugar should not be used with Vegetables, although unrefined sugar may be used in connection with baked Tubers like Potatoes, Beet-roots, Turnips, Parsnips, etc..

Sweet-potatoes
Tomatoes
Turnips

FRUITS

Apples
Apricots
Bananas
Cherries
Citrons
Dates
Figs
Grape-fruit
Grapes
Lemons
Limes
Mangoes
Nectarines
Olives
Oranges
Peaches
Pears
Persimmons
Pineapples
Plums
Pomegranates
Prunes
Quinces
Raisins
Sultanas
Tangerines

Different kinds of Fruits may be used together, and they may be combined with Grains, Small Fruits, Nuts, and Dairy Foods, but they should not be used with Vegetables at the same meal.

Exceptions to this rule are Apples, Lemons, and Limes, which may be used with green Vegetables like Lettuce, Cabbage, Celery, Sorrel, Seakale, etc..

Milk is often injurious when used with Fruits; use Cream instead.

Do not drink water when eating Fruit.

Use no sugar with either raw or cooked Fruits, although Honey is permissible.

SMALL FRUITS

Bilberries (Huckle-berries)
Blackberries
Blueberries
Cranberries
Currants
Gooseberries
Loganberries
Raspberries
Raisin-Currants
Strawberries

Different kinds of small Fruits may be used together, and they may be combined with Grains, Vegetables, Fruits, Nuts, and Dairy Foods.

Use no sugar nor water with small Fruits, although Honey is permissible.

Cream is preferred to milk.

NUTS

Almonds
Barcelonas
Brazils
Butter-nuts
Cashews
Chestnuts
Cob-nuts
Cocoa-nuts

Different kinds of Nuts may be used together, and they may be combined with Grains, Pulses, Vegetables *or* Fruits (but not with Vegetables *and* Fruits at the same meal), Small Fruits, and Dairy Foods.

Small quantities and often is better

than using large quantities.

Nuts, to be of greatest value should be converted into Nut-Creams and Nut butters, and combined with acidulous juices.

Filberts
Hickory-nuts
Pea-nuts
Pecans
Pine Kernels
Pistachios
Sapucaias
Walnuts

DAIRY FOODS

Dairy foods may be used in some forms with all other foods.

Milk
Cream
Cheese
Other milk products
Eggs

Fermented cheese should not be used with any other kind of Dairy food.

When taken raw no two kinds of Dairy foods should be used together.

The germ of the Egg should always be removed before the Egg is used. It is the thick white substance that adheres to the yolk, and it is quite distinct from the ordinary white of the Egg.

MISCELLANEOUS FOODS

Sago, Tapioca, St. John's Bread (Locusts), and many kinds of Flowers may be used with all other Foods.

Savoury Herbs should be used with Vegetables, and a pinch of Spice should be used with Fruits and Small Fruits.

GRAINS
AND THEIR VALUE

So long as man is made up of innumerable intelligences and collective elementaries to perform the work for which he is intended by Nature, and so long as self-preservation continues to be the first law in Nature, just that long he must continue to draw upon the two factors in life to perpetuate his state, and these two factors or provinces are BREATH, which sustains his intellect, and NUTRITION, which perpetuates his physical propensities.

Breath imparts the knowledge of things and upholds instinct in the grosser, and intuition, blended with reason in the more cultured, leading one's senses to make such selections from the immense store-house of bountiful Nature as will sustain the organic functions in their healthy state.

While fruits are of excellent tonic value and vegetables are largely eliminators, neither of them contain enough nutritious value to sustain energy and vitality, although many may live on them to a goodly old age. The "staff of life," owing to the concentrated nature of compounds basic in their make-up, will continue to be realised by the grains, of which there are numerous varieties to select from, and which are of inestimable value in their time and season, and in accordance with climatic conditions. At times one should have barley, and at other times oats, or rye, and again one should alternate these with Indian corn, rice, buckwheat, wheat, and so forth. Still, *in any clime*, WHEAT will continue to remain the main product, filling the bill of fare, and *sustaining perfect health*.

The WHEAT, as well as all other grains, is an improvement due to the ingenuity of man prompted by inspiration. But although all grains are homogeneous to this planet in a wilder state, the WHEAT is a cross of five grains perfected by the world-renowned agriculturist and horticulturist, Zarathushtra, who lived many thousands of years before Plato, according to Greek chronology. [Barley, rye, oats, corn, and rice were combined to make wheat.]

Upon thorough examination and analysis, it is found that the WHEAT contains all the essential ingredients corresponding to the elements of the human-anatomy. The arrangement of its various qualities is of such a nature that, beginning at the glume as its life-centre and following layer upon layer to its outer coating, every element conducive to health is embodied therein, performing or assisting the organs of the body to perform the diverse functions as commanded by Nature. In the glume we find the soluble phosphates in quantities sufficient to quicken the ganglionic system; next to it, in the inner halves, something likened to ovaries, and which constitute the

greater portion of the kernel, are the starches and albumin, which impart heat and energy; enclosing these ovaries are the nitrogenous substances so necessary for the sustenance of the muscular tissues; and encircling it all like unto a protecting layer of the skin are seed coats containing potassium, sodium, calcium, and such salts as assist to convert starch into sugar and consequently quicken digestion and promote assimilation. The layer next to this contains fixed phosphates, sulphur, silicon, chlorine and other minerals which sustain the bones, teeth, sinews, etc.. The outer skin has iron, magnesium and such minerals as are absolutely necessary to promote peristaltic action, assuring proper flushing of the system, giving zest and vigour to the alimentaries, a condition absolutely necessary to sustain harmonic operations throughout the more delicate system, *assuring mental brightness*, and *sustaining man in a condition that will keep him in tune with the Infinite.*

Although, through manifold processes, predigestive and of electrification, all other grains may be improved to take the place of wheat, the latter will continue to hold its own, owing to the fact that no process can be devised to improve upon what Nature has so fully determined in the crystallising of organised elements. Just as water cannot be distilled to a point so fine as to equal fruit juices, so no preparing, however scientific, can bring other grains to a point so highly developed as wheat. For this reason wheat has been man's ideal food for thousands of years and has ever been the ambrosia, the manna of heaven, unto the health of the nations.

The discovery of wheat was made quite early in the history of man and the fact became generally known that it was indeed the most balanced and most nutritious of all grain foods, supplying in natural proportion all the properties so essential to the building and development of perfect health in the human body.

Once the full value of wheat and its treatment in preparing dishes is realised, man will be able to simplify his methods of living to the extent of realising the words of the Great Teacher that "man lives not for food alone, but for the very word which proceedeth from the mouth of God." Yea, man will know that there are greater enjoyments, more healthful to the body, and by far more ecstatic experiences conducive to the unfoldment of treasures latent in the mind, than those induced by eating and drinking, and then again to his senses shall be recalled the wonderful words of the saying: "The Kingdom of God does not consist of mere eating and drinking."

With the application of a little ingenuity man can soon learn to prepare innumerable grain dishes which will completely fill the bill and which, used alternately in regular order, with the addition of such vegetables and fruits as are in season, gives him the assurance of reaching the goal he strives after—perfect health, prolonged happiness, and a harmonious home.

PREPARATION OF GRAINS

Before use, the exposure of grains to the direct rays of the sun for a period of several hours enhances their vitamin-value.

It is desirable also to roast grains (whole, crushed or milled) to a golden brown in the oven, either dry or in a little olive-oil; the roasting or browning process changes the starch content into dextrin, thus assisting assimilation.

Grains should be well cleansed in order to rid them of impurities, and then soaked in cold water for at least forty-eight hours, in like manner to the pulses, the water to be changed twice each day and fresh added; this not only increases the bio-chemic salts, but renders them more wholesome and easier to prepare in various dishes.

1. WHEAT FOR INFANTS [*Exceedingly Important*]

Soak half a cupful of *whole-grain* WHEAT, then add thereto one quart water and cook it slowly in a thick earthen-ware jar in the oven, or in a double-boiler for three hours or more, until tender. When tender, pass it through a colander and return both the puree and the residue to the saucepan. Add thereto one pint of fresh milk, and a little salt, and sweeten with one and a half tablespoonfuls *Sugar of Milk*, or a tablespoonful brown cane-sugar. Allow it to come slowly to simmering point and then pass it through a cheese cloth.

This gruel may be given to babies in a feeding bottle. Should the babe be weakly, add to the foregoing, *at the same time as the milk*, the meal of ten finely milled and blanched almonds. After blanching the almonds, dry them immediately and pass them through a nut mill. Add to the above recipe and then strain.

Where a reserve of gruel is desired, increase the quantities of wheat and water proportionately, and after cooking strain through a cheese cloth, or, "mull-mull." Add the fresh milk and other ingredients, as required, at the time of using.

2. WHEAT FOR CHILDREN AND INVALIDS [*Most Valuable*]

Take a quantity of soaked *whole-grain* wheat. Place in a saucepan with plenty of water and cook until the kernels burst and a creamy substance exudes. Press through a sieve and serve with cream. In case of debility, blend therewith some finely ground *blanched almonds* or pine-kernels.

The addition of ordinary white sugar is not advisable, as it causes fermentation and lays a basis for diabetes. Use, instead, pure honey, maple syrup, genuine brown cane-sugar, or sweet fruits such as raisins, dates, figs, etc..

3. WHEAT GRUEL

Take one cupful whole-grain wheat, grind it into a course flour in a mill and sprinkle it into three pints salted, dancing, water. Cook for forty-five minutes or longer, stirring frequently. Add thereto two tablespoonfuls clarified butter, also a little pure honey, as desired. Serve with any fruit in season and fresh cream.

4. PLAIN WHEAT DISH

Soak one and a half cupfuls whole-grain wheat, then place it into a saucepan with plenty of water, adding one teaspoonful salt. Bring to boiling point and afterwards transfer it to a double-saucepan and cook for from four to five hours; or it may be steamed as in recipe No. 8. The wheat grains will burst, exuding a creamy white substance. Serve entire with cream.

5. STEAMED WHEAT

Soak a cupful of *whole-grain* wheat, then place it in a fine sieve over a vessel containing boiling water in such a way that the wheat will be surrounded by the steam but does not touch the boiling water. Cover and allow it to cook for twenty minutes. Put it on a dish, sprinkle it with heated, seasoned oil, or cream, and serve hot.

6. WHEAT ROAST

Soak one cupful whole-grain wheat, twelve hours or more, changing the water occasionally, then cover with plenty of water and cook until the kernels burst. Allow it to cool. Then add: One large grated onion, one cupful ground almond, one well beaten egg, one saltspoonful marjoram, one saltspoonful sage, season with celery-salt and cayenne-pepper, adding two tablespoonsful of olive-oil. Place in a buttered dish and bake for one hour. Serve with tomato-sauce, or, browned flour-sauce.

7. SHREDDED WHEAT

When whole-grain is not available, Shredded Wheat is an excellent substitute. Pass the biscuits through a nut mill or crush them finely with a rolling pin or with the hand. Serve, with fruit and cream. (Always dry out thoroughly in oven before using).

8. DISH OF THE WISE

(*a*) Take a cupful of whole wheat and soak for several hours. Then place it in a sieve, over a saucepan containing some water, but always keeping the water below the level of the seive. Cover with a tight lid and steam for half an hour. At the same time heat in a pan half a cupful olive-oil, add a teaspoonful of paprika, allow it to simmer, then add four grated onions and a clove of garlic very finely chopped. Simmer until the onions are transparent.

Now pass the wheat through the mincing machine. Pour over it the onion-sauce, and a little salt, a good teaspoonful of powdered marjoram, or any other herb, half teaspoonful of powdered ginger, and a sprinkle of thyme. Mix well with two forks.

(*a*) Place the mixture into cold cups, slightly pressing down the contents. Turn out on individual plates. Serve cold with salad- and French-Dressing, arranged on the same plate.

(*b*) This dish may also be served hot with a tomato-sauce, mushroom-sauce, curry-sauce or a brown-sauce. Serve a baked vegetable dish with it.

(*c*) Prepare the steamed wheat, but instead of vegetables, chop four prunes, two figs, some raisins, and soak them in orange juice. Grate one apple, at the time of serving. Mix all the fruits with the wheat, adding a pinch of cinnamon. Place into cold cups, turn out, sprinkle with ground nuts. Serve with fresh cream, a lemon-sauce, or a vanilla-sauce.

9. *ONION*, APPLE AND WHEAT DISH

Wash two cupfuls of wheat and soak for a few hours or over night. Cook slowly for three hours in sufficient water to cover. While the wheat is cooking, peel and chop fine three large onions and fry for fifteen minutes in two tablespoonfuls of olive-oil or nut-butter. Simmer one teaspoonful of mixed herbs and two bay-leaves in one-half cupful of water for the leaves and add the liquid and the fried onions to the wheat, also adding one-half teaspoonful of curry-powder, one-quarter teaspoonful of salt, five large grated apples, and one and one-half cupfuls of milk.

Mix thoroughly and pour into a casserole, and bake slowly for two hours. Serve with brown sauce.

10. SAVOURY WHEAT DISH, I.

Wash one and one-half cupfuls of wheat and soak for a few hours or over night. Cook slowly for three hours in sufficient water to cover. While the wheat is cooking, peel and chop fine three or four large onions and the same quantity of tomatoes and celery-sticks. Fry these vegetables for fifteen minutes in two table-spoonfuls of olive-oil or nut-butter. Simmer one teaspoonful of mixed herbs and two bay-leaves in one-half cupful of water for ten minutes. Discard the leaves and add the liquid and the fried vegetables to the wheat, also adding one-half teaspoonful of curry-powder, one-quarter teaspoonful of salt and one-half cupful of milk. Mix thoroughly and pour into a casserole and bake slowly for two hours. This dish will prove the best that nature can produce.

Other vegetables, such as peas, carrots, beans, cauliflower etc., may be used.

11. FRUIT WHEAT DISH

Wash two cupfuls of wheat, soak for a few hours, or over night. Cook slowly for three hours in sufficient water to cover. Put into a Pyrex dish, adding one apple cut into quarters, one sliced banana, one slice of a pine-apple chopped, ten blanched almonds cut lengthwise, a few raisins and three chopped figs.

Bake slowly for two hours. Serve with fresh cream.

12. FRUIT WHEAT DISH—With Dried Fruits

The same fruit wheat dish, as described above, can be prepared with dried fruits. Wash carefully the dried fruits, by pouring boiling water over them. A nice assortment of dried fruits is the following:—

Six prunes.

Six apple-rings.

Two figs.

Two dates.

Some raisins.

Soak them over night, well covered, in fresh fruit juice: Orange juice, apple juice, or pineapple juice. When the wheat is cooked, mix in the fruits.

Put the mixture into a Pyrex dish, adding some chopped blanched almonds. Bake slowly for two hours.

Serve with fresh cream.

Other combinations, such as prunes, pears, figs; or prunes, apricots, apples, are also very interesting to use.

ENTREES or SAVOURY DINNER DISHES

An effort has been made in this department to give, besides the foregoing, other suitable dishes designed to take the place of meats. In many instances when the housewife has resolved to adopt a new regime, one which leads to the betterment of mental and physical conditions, and one which excludes all animal foods whatsoever from the daily menu, she is at a loss to know just what to select when supplying the family table. The task need no longer be difficult, for in the preparation of these dishes, others of similar nature will suggest themselves and the various items may be procured accordingly. To obtain the best results, there is only one rule to be observed. *Do not use fruit with vegetables.*

Vegetables should be combined with grains and nuts; fruits with grains and nuts; but not vegetables with fruits.

Onions and garlic may be combined with apples (sour apples) without detracting from the beneficial qualities of either.

Do not use raw flour in making savouries; brown it in a moderate oven, and stir occasionally to prevent burning.

When using bread, it should always be cut in slices and toasted to a golden brown in a moderate oven. It is necessary to *procure a mill*, or small *grinder*, with which to grind the toasted bread, biscuits, shredded wheat biscuits, nuts, grains and so forth for use in these recipes. These mills are indispensable to all well-regulated kitchens. It is well when purchasing nuts to select those which have been shelled; they are more satisfactory in the end. They have been put through special machines which take out the kernels in a comparatively unbroken condition; besides there is a great saving of time. Nut should be fresh, otherwise they will be rancid and unfit to eat.

Use earthenware, porcelain or glass dishes for baking purposes. Tin is easily oxydised and often poisons the food.

To facilitate the variation in savouries we give the following formulae, the use of which will satisfy the most fastidious taste. Select for use only strictly fresh articles.

Green fruits and vegetables which have become wilted after being picked, have lost their life-giving properties and are so much dead matter. They should be eaten as soon as possible after being picked, observing particularly that all are free from blemishes, and there are no evidences of decay. As soon as disintegration sets in, the entire fruit or vegetable, as the case may be, has become permeated with effete matter that *produces like conditions* in everything with which it comes into contact.

SAVOUR DISHES WITH VEGETABLES

13. SAVOURY WHEAT DISH, II.

Roast to a golden brown one cupful of wheat which has been well washed and dried in the sun or oven beforehand. Add sufficient water to cover, cook slowly until the kernels burst—about three hours. While the wheat is cooking, peel and chop fine two large onions and the same quantity of tomatoes and celery sticks. Fry these vegetables for 15 minutes in two tablespoonfuls of olive-oil or nut-butter. Simmer one teaspoonful of mixed herbs and two bay leaves in one half cupful of water for ten minutes. Strain, add the liquid to the cooked wheat, then add the fried vegetables, one cupful of ground nuts and seasoning to taste. Pour into an earthenware or glass dish, and bake for one hour. When serving sprinkle with fresh, finely chopped celery leaves.

Other combinations of vegetables can be used in the preparation of this dish.

14. ROYAL BARLEY

Roast to a golden brown one cupful of barley, then put it into a baking dish. Pour over it two cupfuls of vegetable broth well seasoned with celery-salt, cayenne pepper, paprika, and one teaspoonful of lime juice. Chop finely three cupfuls of vegetables—a combination of three is best. Fry for fifteen minutes in half a cup of oil, one large grated onion, two cloves of garlic, one teaspoonful of marjoram and one bay-leaf; strain. Put through the nut-mill enough nuts to make one cupful. Mix thoroughly all the ingredients and bake until the barley is tender—about an hour. More broth can be added, if needed. Stir a few times while cooking. When serving sprinkle over the dish some finely chopped parsley and serve with a sauce.

Mushrooms *or* grated cheese may also be used instead of nuts.

15. BAKED NUT ROLL

Cut a small loaf of whole meal bread into slices; toast in a moderate oven to a golden brown, after which soak it in water until soft; press out the water, then add one cupful of milled nuts such as: Pine-kernels, brazil-nuts and hazelnuts. To these add one onion chopped and lightly fried in two tablespoonfuls of oil, two well beaten eggs, a teaspoonful of powdered sago, a coffeespoonful of marjoram, a dash of thyme, some chopped parsley and celery leaves. Mix thoroughly, and form into a roll, using whole-meal flour on the board and hands.

Place the roll in a baking dish with plenty of butter with which to baste it. Stick some almonds cut lengthwise into it. Bake to a nice brown in rather a hot oven for about an hour. Serve

with tomato sauce, brown sauce, or mushroom sauce. Decorate with water cress or fresh parsley. The same dish can be served cold. Cut the loaf into slices and put around it a salad such as: Lettuce leaves, tomato slices, grated cabbage and pour over it French dressing.

16. CARROT ENTREE

Boil until tender a cupful of carrots, half a cupful of parsnips and two cupfuls of celery, all finely chopped. Then take three tablespoonfuls of browned flour and boil it in one and a half cupfuls of hot water until thick. Mix with the boiled vegetables and add a cupful of finely ground onions, two cupfuls of browned bread crumbs, two well beaten eggs, one tablespoonful of salt. Mix thoroughly and put into a well-oiled dish and bake in a moderate oven for twenty minutes. Serve with tomato sauce. (*Page 15.*)

17. PEAS ENTREE

Mash fine a cupful of boiled green peas, and add half a cupful of strained stewed tomatoes, two eggs, two tablespoonfuls of nut butter rubbed smooth in a little hot water, a cupful of finely ground shredded wheat biscuits or browned bread crumbs, a half cupful of onion juice, a half teaspoonful each of marjoram, thyme and salt; mix well, put into an oiled dish and bake twenty minutes. Serve with chopped mint.

18. PEAS ROAST

Take a pound dried green split peas and boil until mushy. Peel a medium-sized onion, and place it whole in the saucepan with the peas, and boil with them for flavouring. (If the water boils away before the peas are done, add some more.) Use no salt as it hardens the water and takes longer to cook the peas. When done remove the onion and mash the peas through a sieve; now add salt to taste, two eggs beaten light; stir well, and put into an oiled tin (a small, deep bread tin is best), and bake for twenty minutes. When done, turn out the loaf on to a dish, and pour over it tomato or mushroom sauce. Garnish with mint or parsley. (*Page 15.*)

19. VEGETABLE ENTREE I

Take equal quantities each of sweet potatoes, squash, tomatoes and parsnips, to make two cupfuls; boil for 45 minutes and mash all fine. Brown a cupful of flour, then mix with a cupful of water or milk. Add this to the vegetables, mix well, and roll up into a lump. Make a dressing as follows:—Chop an onion fine and cook slowly in a frying pan with two tablespoonfuls of oil or cocoanut butter; add one teaspoonful each of finely chopped thyme, two tablespoonfuls of lemon juice, half a cupful of toasted bread crumbs, one teaspoonful of salt, and one cupful of water or milk. Spread out the lump, enclose the dressing, roll up and oil all over; put into an oiled dish and bake for 30 minutes in a moderate oven. Serve with brown sauce. (*Page 15.*)

20. VEGETABLE ENTREE II

One cupful of cereals. Three cupfuls of finely chopped and boiled vegetables; selection should be judiciously made, avoiding as much as possible the use of cabbage and potatoes. (See list of vegetables for those most desirable.) One cupful of nuts, and one tablespoonful of savoury herbs. Two well-beaten eggs, and one or two cupfuls of liquid—hot water, vegetable broth, or milk. A teaspoonful of salt, a little spice, except black pepper, to suit taste; bay-leaves, celery seeds and green parsley will give a decided taste, and ketchup will give additional flavour. Bake for one hour.

21. ROYAL MACCARONI

Break into three-inch length half a pound of maccaroni and boil rapidly for twenty minutes in slightly salted water. When done put into a collander to drain. Oil a deep dish, and put in a layer of maccaroni and sprinkle with a rich cream cheese, then a layer of tomatoes, a layer of maccaroni, and a layer of French mushrooms; on top of these put a layer of maccaroni, then last of all a good layer of cheese. Over this spread tomato sauce, or, if preferred, a cream sauce may be used. Bake in a moderate oven for half an hour. (*See page* 15.)

SAUCES

TOMATO SAUCE NO. 1

Cook without water enough fresh tomatoes to have a pint of juice. Add one grated onion, one or two bruised bay-leaves, two cloves, a pinch of salt and of sugar. Boil all together for 15 minutes, then strain and add a pinch of soda. Mix a tablespoonful of whole-meal-flour with a tablespoonful of olive-oil, and when it is well blended, stir it into the tomato-juice, boil until thickened to the consistency of cream. This sauce may be thinned with milk or cream to suit taste.

TOMATO SAUCE NO. 2

Fry to a golden brown one finely chopped onion in two tablespoonfuls of cocoanut butter, and then add a tablespoonful of flour. When the flour has browned stir in gradually a cupful of sweet milk, and half a cupful of fresh tomato juice. Cook until it thickens, then flavour with a teaspoonful of peanut butter creamed with a little milk.

BROWN SAUCE, I.

Brown one tablespoonful of flour, and mix to a smooth paste with a little cold milk, add to a pint of boiling milk or cream and cook for ten minutes. Stir into it and mix thoroughly a cupful of stewed strained tomatoes. Seasonings to taste.

BROWNED SAUCE, II.

To two tablespoonfuls of flour, use an equal quantity of olive-oil. Put into a frying pan over a slow fire to brown, stirring frequently to avoid burning. As soon as it is brown pour into it gradually three cupfuls of hot water, or vegetable broth, stirring it well. Add two tablespoonfuls of mixed nuts finely ground; pine kernels are preferable. As soon as perfectly smooth add a teaspoonful of mushroom ketchup, a pinch of MAZDAZNAN curry powder, celery salt, and a bruised bay-leaf. Allow it all to boil up slowly, and it will be ready for use either in soups, to improve the flavour, or for serving with savouries, rissoles, fritters, spaghetti dishes, eggs and salads.

CREAM SAUCE

To a cupful of milk add a dash of Cayenne pepper and of celery salt, and allow it to come to the boiling point. Now take one tablespoonful each of flour and oil, cream it well, and add to the milk as soon as it begins to simmer. Stir it well until smooth.

MUSHROOM SAUCE

Make a sauce the same as browned sauce. To this add a tin

of mushrooms finely cut including the liquor. Simmer for five minutes after adding the mushrooms.

MUSHROOM GRAVY

Take one large onion, cut fine and cook in a saucepan containing two tablespoonfuls of clarified butter; when turning golden yellow add finely cut mushrooms to a cupful of cream. Fry a tablespoonful of finely cut parsley and add to the above. Then thicken with flour and season with salt to taste.—Delicious with mashed potatoes.

MINT SAUCE

Mix a tablespoonful of granulated sugar with a cupful of lemon juice, and add finely chopped mint. Serve with green peas and other vegetables. Parsley may be substituted for mint.

CURRY POWDER.—Old Time Indian Recipe.

A valuable mixture of condiments successfully used in pulmonary, rheumatic and digestive troubles, where suitable food is used. It must be compounded fresh and not bought ready-made, as the commercial curry-powder is nothing more than a mixture of cayenne and turmeric, and many brands contain large quantities of rice-flour and salt, others cocoanut and dried garlic. The two latter are of good remedial value when used with *true Curry Powder.* Compound curry as follows: Four and one-half ounces turmeric, four ounces coriander seed, three ounces tellicherry black pepper, one and one-half ounces each of English-mustard and foenugreek seeds, one ounce each decorticated seeds of cardamon and cumin, and cassia-buds, one-half ounce each of Jamaica-ginger, Zanzibar-cloves, Penang-mace, Zanzibar-cayenne. Grind fine and put up in air-tight tins. Use freely in rice and other grain and vegetable-dishes suitable for invalids. To the intellectually or mentally based curry will prove the best remedial agent when diseased. When well again curry must be discarded from our daily menu.

VEGETABLES

The chemical analysis of diverse vegetables is too well known to all students of the vital questions, namely, the Problem of Perfect Life, to repeatedly dwell upon it here. Furthermore, the analysis of foods from a chemical standpoint alone does not suffice where one concerned in the use of food has not learned to make his selection suitable to his nature. First of all, we must remember that vegetables are valuable to the consumer only during the vegetable season, according to the local market; and of medical value out of season to the invalid only.

Vegetables are not in their entirety foodstuffs; they are, in accordance with kind and quality, of hydrogen, oxygen, phosphorus, sulphur, iron, nitrogen, and many other ingredients nutritious only when combined with breadstuffs, grains or cereals. Vegetables are, owing to their greater quantity of liquids or hydrogen and minerals contained in them, classed as eliminators, and are of inestimable value and they are a necessary part of a well balanced meal to furnish flushing and waste matter for the more solid grain, nut and dairy foods, besides furnishing valuable salts and acids of medicinal value, thus stimulating the various digestive organs.

Vegetables which ripen above ground are preferable as food for man, as they contain a greater percentage of organised salts and acids, as well as nutritious elements, sustaining proper organic action. They should be served with trimmings of fresh parsley, mint and sage.

Vegetables which ripen on the ground are valuable as to their tonic qualities and thus splendid eliminators; when used with aromatic seeds in small quantities they help to expel foreign organisms, bacteria, entozoa, etc.; these aromatics are anise, caraway, fennel, dill, celery and zadvar.

Vegetables that rippen above the ground should be used as salad, consequently in their natural state, and when prepared should be sliced with a sharp knife, cut in a chopper, or if a leafy kind should be cut with scissors, or, torn. When cooked, they should not be allowed to boil in water, but in clarified butter, olive or vegetable oils, or half and half. The butter or oil should come to a heating point, readily extracting the liquid from the gradually added vegetables, by virtue of steaming. By keeping the vessel over a slow fire, these vegetables will soon boil in their own liquid and when nearly done boiling water may be added, if these vegetables are to be used for a broth or soup. Neither salt nor flavours should be added until ready for serving.

Green vegetables, which are to serve as stock for soups, broths, gravies, consommes, bouillons, etc., may be cooked in water that is

just beginning to boil and that has been slightly salted, allowing one desert spoonful of salt to two quarts of water. Water that has been boiled for long becomes flat and destroys the flavour and appearance of the vegetables. Cooked green vegetables will improve through the addition of one bay-leaf to the quart of water.

Green vegetables which are to serve as a dish should be boiled as above, and after ten minutes boiling the first water should be poured off, then the butter or oil desired added, and a fresh supply of water which has been heated in another vessel may be slowly added up to the desired quantity, at all events only enough to keep the vegetables from getting scorched. This process removes the poisonous acids which might otherwise prove injurious.

When vegetables matured on the ground are to be used as a cooked dish, they should be cooked in as little water as possible, and boiled quickly with a little oil to hasten the process, the vessel always being kept covered at the start. When nearly done add rich cream but do not allow it to boil, but simply to heat to the boiling point. Green parsley finely cut, and wilted in hot butter for a minute or two, will add to the medicinal value of the cooked vegetables matured on the ground.

Vegetables which ripen beneath the surface should be used very sparingly, and only during cold weather, as they contain largely soil substances not congenial to the health of man, particularly the ones more highly organised as to functional arrangements. But even here we may find good use of them when scientifically prepared and combined with savouries of diverse kinds, and powdered herbs and roots.

Vegetables reaching maturity below the ground can be used in their raw state as quick operating eliminators, but in small quantities only, owing to their largely poisonous acids. As foodstuffs they develop nutritive value chiefly through roasting or baking in hot ashes or in the oven. When to be boiled in their skins, or in additionally wrapped skins, like Indian corn and palm leaves, they must be boiled quickly and in soft water, or water lightly softened with borax or bicarbonate of soda, adding whole aromatic seeds to the boiling water in sufficient quantities, *viz.*, one to three pinches to the quart of water. If boiled with their skins pealed off they should be boiled quickly, and with just enough water to have them done the moment all the water has boiled away. Then these vegetables should be thoroughly mashed and prepared with cream, or butter, and put into an earthenware dish to bake in the oven for the purpose of dextrinising, adding a sprinkle of grated cheese to cover the top of a layer one inch in depth, adding another sprinkle to each additional layer.

In boiling odouriferous vegetables, like onions, garlic, asparagus, cauliflower, etc., a very small quantity of Cayenne-pepper and a few sprigs of parsley put into the water will somewhat neutralise the disagreeable odour and, still more, keep the odour from spreading when such vegetables are boiled in milk or butter-milk.

All vegetables intended for food should be strictly fresh, which condition is indicated when they break or snap crisply. Homegrown vegetables such as lettuce, peas, beans, spinach, carrots, sweet-corn, etc., should be gathered in the morning when wet with dew. Vegetables are improved by being put into cold water before cooking.

Wilting savouries and herbs should not be used until they have been dried thoroughly in the shade. As long as fresh ones are procurable do not use dried savouries.

Once vegetables have wilted and cannot be redeemed through the chilling process they should be discarded as food for man, as wilted vegetables will do more to impair peristaltic action than any other one thing.

COOKED VEGETABLES

1. BAKED POTATOES

Choose large potatoes. Scrub them well with a vegetable brush. Cut a "V" across each potato, from end to end, and sprinkle into it carraway seeds, and place them on the metal bars in the hot oven. Leave until thoroughly baked. (Allow one hour for large sized potatoes). The best way, however, is in hot ashes.

2. SPINACH

Wash in pinky the desired quantity of spinach, then pour over it boiling water. Put it into a Pyrex dish and pour over it olive-oil seasoned with a dash of ginger, paprika and salt. Add some raisins. Bake for twenty minutes. Add a little lime-juice just before serving.

3. BAKED TOMATOES

Cut out the top stem part of the tomatoes, place them into a Pyrex dish. Prepare a mixture of butter, seasoned with a little "Marmite," chopped onion, chopped parsley and celery. Fill it into the top of the tomatoes, then pour over them some olive-oil, seasoned with a dash of Cayenne-pepper, paprika and salt. Sprinkle with thyme. (If too much water comes out of the tomatoes, take it off and keep it to prepare a soup or a sauce.)

4. VEGETABLE CASSEROLE

Cut in small cubes some brinjals and potatoes, add some cut French beans, also tomatoes, onions, and a handful of fresh peas. Put all these vegetables into a well-oiled baking dish and pour over all olive-oil, seasoned with a dash of salt, Cayenne-pepper, paprika, and add the seasoning to your choice: Marjoram, cloves, bay-leaf, chopped parsley, chopped celery, green pepper, etc.. Bake in a covered dish for forty minutes, then without lid for ten more minutes. Add a little lime-juice, just before serving.

5. ROYAL BRINJALS

Cut the brinjals into slices, lengthwise. Slice also some onions and tomatoes. In a well-oiled baking dish place one layer of onion, one layer of brinjals, one layer of tomatoes, repeating until the dish is full. Pour over all olive-oil, seasoned with salt, paprika, Cayenne-pepper, a pinch of marjoram. Bake for forty minutes in a covered dish. Then take off the lid and pour over three tablespoonfuls of grated cheese, well mixed with the same quantity of cream. Let it brown and serve.

6. BRAISED WHITE CABBAGE

Cut the cabbage into four, six or eight sections—according to its size—place the pieces into a baking dish, pour over olive-oil, add a little Cayenne-pepper; put the lid on and bake for about forty-five minutes.

7. RED CABBAGE

Chop the cabbage and grate also half the quantity of apples. Put into a baking dish olive-oil, well seasoned with salt, Cayenne pepper, two cloves and one bay-leaf. Fold in the cabbage and apples and bake with the lid for about forty-five minutes. Add a little lime-juice just before serving.

8. The tops of beets, radishes, turnips, etc., (except carrot top) should not be cast aside, as they make a fine vegetable dish. When they are cut fine and cooked in butter, with additional cream, and flavoured with parsley and mustard-leaves; a combination of vegetable-tops will prove an excellent eliminator of particular value to those suffering from fibroids, tumours and cancers.

9. Tomatoes should never be steamed in water, as also okra, brussels-sprouts, cauliflower, spinach, which are to be par-boiled for a few minutes and the water thrown away. Then the saucepan should be well oiled or buttered, and the vegetables allowed to steam slowly in their own juice. A casserole over an asbestos-plate, or a double boiler is recommended, or, the oven (with lid).

10. French-artichokes should be par-boiled, then steamed in just enough water to keep them from burning, and to have them done in forty minutes. When nearly done salt them to taste, and allow them to steam for just a few minutes longer. Put a few cloves into them.

Speaking of cooking vegetables, a wise man once said that if you throw away the water in which vegetables have been boiled, you might as well put on green spectacles and eat shavings.

SALADS

Salads made without vinegar or strong spices are appetising and quite wholesome. They should be eaten only in moderate quantites, and, with nutritious nuts and grain foods, form a valuable adjunct to a well balanced meal. A little study of their nature and qualities will enhance their value. In making salads *do not mix fruits with vegetables*. Nuts may be used with either fruits or vegetables.

1. BEET-ROOT SALAD

Slice and cut into dice enough cold cooked beet-roots to make a pint; heap them in the centre of a dish and surround with leaves of head-lettuce. Serve with a Sauce Tartare. Pour it over the beets and garnish with pieces of nuts or radishes.

2. CUCUMBER SALAD

Peel and cut crosswise into very thin slices four medium-sized green cucumbers. Place in a large bowl, and mix thoroughly with one teacupful of salt. Cover and let stand one hour, then wash quickly in two waters to remove salt. Mix two table-spoonfuls of lemon juice with one cupful of thick sweet cream, and pour over the sliced cucumbers. Serve on lettuce leaves garnised with cress and parsley. (The soaking of cucumbers in salt for an hour effectually removes the poisonous acids which so frequently cause cholera morbus.)

3. LETTUCE SALAD

Wash and break the leaves from two large lettuce-heads. Place in a salad bowl and pour over it a suitable dressing (French dressing, Simplicity dressing, etc.) Garnish with sliced tomatoes and finely chopped onion tops.

4. MACEDONIAN SALAD

A. Use one boiled beet-root, one small onion, one root of celery, one boiled carrot, half a cupful of boiled asparagus tops, two table-spoonfuls of cooked green peas, one dozen boiled French beans, and one cupful of mayonnaise dressing. Cut the beet-root, carrots, beans and celery into small pieces, chop the onion very fine, mix all the vegetables carefully together, and then add the dressing, and serve *immediately*. If the vegetables are properly prepared, then placed on a crisp lettuce, this makes a delicious salad.

B. Secondly, the same mixture can be put into tomato shells with dressing on top, then half a walnut.

5. ONION SALAD

Cut up two onions, grate one small bunch of radishes, also one turnip, and mix together thoroughly. Add two tablespoonfuls of finely ground pea-nuts, and a little oil and lime juice. Serve on large cabbage leaves sprinkled over the top with celery leaves and a pinch of savoury herbs.

6. PLAIN POTATOE SALAD

Cut six cold boiled potatoes into small cubes, add two finely grated raw onions well creamed in oil, one tablespoonful of minced parsley, and sufficient French dressing to suit taste. Put in a salad bowl, and, if you wish, garnish with the crisp leaves of one head of lettuce.

7. COLD SLAW

Slice the cabbage very fine, then place it into a collander and pour over it boiling water. Chill it well and at the time of serving add one onion finely chopped or grated, mix well with French dressing. Serve on green lettuce-leaves and scatter over it a sprinkling of carraway seeds and a dash of paprika.

8. SPINACH SALAD

Use three cupfuls of spinach and two onions finely cut, and half a cupful of parsley. Mix all together. Add a pinch of thyme, olive-oil to suit the taste and lemon juice. Serve with mushrooms and red rice.

9. TOMATO SALAD

Select large, smooth tomatoes, scald them, skin quickly, and drop them into cold water to chill. Slice them and put in a salad bowl, in layers alternating with the following preparation:—

A small quantity of onion, parsley, and cress finely chopped and mixed with Salad-dressing.

Garnish with lettuce-leaves or cress.

FRUIT SALADS

1. DELICIA SALAD

Slice one apple, two bananas, and three prunes. Spread over these a half cupful of soaked grain of any kind and serve with nut cream.

2. FRUIT SALAD

Take apples, bananas, pineapples and oranges: peel and slice them, using an equal quantity of each. Sprinkle with coarsely ground pine kernels and almonds. Serve with whipped cream, garnished with candied cherries.

Do not use tinned fruits for fruit salad.

3. JARAH

Take one sliced pear, twelve grapes, one sliced orange, one table-spoonful each of finely ground walnuts and pine-kernels. Serve with flaked rice in half an orange skin, cut like a little basket; and use whipped cream if desired.

4. FRUITA SALAD

Cut fine with scissors fifteen seeded raisins, three prunes and one fig. Spread over a half cupful of browned rolled oats or soaked wheat. Pour over it half a cupful of nut-cream and let it stand for fifteen minutes before serving.

5. NUT FRUIT SALAD

Cut in very small cubes four tart apples, mix with it a pound of blanched walnuts. Add sufficient nut-cream dressing to suit the taste. Garnish with sliced orange if desired, and the flavour will be greatly improved by the addition of finely chopped citron-peel.

6. GRAPE-FRUIT CUPS

Cut the grape-fruit in half and remove the flesh and juice with a small spoon. Mix with some stoned dates and finely ground nuts. Serve in the empty grape-fruit halves. Let it stand for a while. When serving, add a sprinkle of powdered ginger and decorate with whipped cream.

7. FRENCH FRUIT SALAD

Peel and slice thinly two oranges. Add the same amount of sliced pineapple and three spoonfuls of finely chopped almonds. Serve with mayonnaise dressing, fruit juices, or whipped cream.

8. APPLE CUPS, No. 1

Soak some dried figs in orange juice overnight. Take one apple for each person. Scoop out a good deal of the inside to make a cup. Then take what is scooped, mix it with the soaked figs, two tablespoonfuls of fresh cream, and a dash of cinnamon or nutmeg. Fill the apple cups, and pour over them some nut cream.

9. APPLE CUPS, No. 2

Apple cups can be made as in the above recipe (8), but by replacing the figs by a handful of seedless raisins soaked in pineapple juice.

10. BANANA—APRICOT WHIP

Soak six dried apricots in cold water overnight. Just before serving, chop the apricots fine, whip them with two tablespoonfuls of fresh cream and two bananas, adding a dash of Cayenne-pepper. Serve in glasses and sprinkle with freshly grated cocoanut.

11. WALDORF SALAD

Take good sized apples; scoop out a good deal of the inside to make a cup. Then take what is scooped out of the apples, chop fine and mix with chopped nuts and rich salad dressing. Fill the apple cups with this preparation and serve on lettuce leaves.

12. DIETETIC DISH OF APPLES. (*Quantities for one person.*)

Soak overnight one desert-spoonful of raw rolled oats in two desert-spoonfuls of cold water. Just before serving mix in a bowl the soaked oats with the juice of two limes, and one tablespoonful of honey, and one desert-spoonful of fresh cream. Grate into the bowl the apple including the skin, and mix all well but lightly, with two forks.

Serve in a glass, or an individual bowl, and sprinkle over it one desert-spoonful of ground nuts, such as walnuts, almonds, hazelnuts, pine-nuts. Serve at once.

Whole wheat flakes, barley kernels or crushed rye may be used in place of the rolled oats. (Each must be put into the oven to dry out well, before using.)

13. DIETETIC DISH OF FRUITS

Instead of apples (as described in recipe 12) any fruits in season, such as pineapple, mangoes, papaya, bananas, oranges, sweet limes, may be used in the preparation of the dish. If berries are used, some should be crushed and mixed with the other ingredients, and the rest used whole to decorate the top of the glass.

FRUIT RECIPES

A. GRATED APPLES

Take healthy, good sized apples, wash them in pinky, then grate including skin and core. Add quickly a little lime juice or orange juice, also a dash of cinnamon, or nutmeg, and sprinkle with any grated nuts, such as:—

Walnut
Haslenuts
Cashew Nut
Peanut
Brazil Nut
Almonds, etc..

Serve with fresh cream.

B. BAKED APPLES

Choose perfect apples, with fresh fragrance; only a first quality to be used—it is the life of the apple which is to benefit us, so choose carefully. Wash thoroughly in pinky. Then the stem and the blossom may be cut out. A few raisins, or chopped figs, may be placed on top and cream poured over them. Now place into a baking dish and put into a moderate oven until tender. Serve hot or cool, with a sprinkle of freshly ground almonds, or fresh cream.

C. WHIPPED BANANA

Take a well ripened banana, mash and beat it well with a fork, until creamy. Whip in a tablespoonful of grape juice, or, orange juice, or a few drops of lime. Then add a spoonful of fresh cream, and a little pinch of Cayenne-pepper.

D. BAKED BANANA

I. Split lengthwise ripe bananas and place into a buttered baking dish, cut sides up. Put a thread of honey, or, natural sugar over the tops. Scatter lime juice over all, cover and bake until transparent, then uncover and brown slightly; put a little lemon juice over each. Serve in the same dish, passing fresh cream.

II. Choose well ripened bananas. Cut them into halves, lengthwise. Pour cream into a flat baking dish—enough to cover the whole bottom—then put in the half-bananas, cut sides up, and sprinkle over them some raisins. Bake in moderate oven until transparent. When serving add a few drops of lime juice.

E. **GRAPE FRUIT**

Cut the grape fruit in two halves, crosswise. (One half is enough for a person.) Remove seeds with prongs of a fork. Then pour some fresh cream into it and sprinkle with a little ground ginger.

F. **ORANGE**

Peel the orange, then slice it with a sharp knife. Sprinkle with freshly ground cocoanut, or, almond (or any other nut). Serve with fresh cream.

G. **PINE APPLE**

I. Slice with a long, sharp knife, over a cutting board. Then trim the edge off; or, a slice may be served as it is, and each trim his own freshly.

II. Cut off the outer skin and stem, then "fork" the flesh of the fruit downwards from the stem end, into small pieces. Put into a pretty, deep glass dish and serve.

FRUIT JUICES

1. ORANGE COCKTAIL

Take out the juice of one orange and one sweet lime.

1. Soak into it some finely cut Agar Agar.
2. Put through the nut grinder ten blanched almonds. Soak them in some lime juice, then pound them. Put through a strainer and add to the orange juice.

2. PINEAPPLE COCKTAIL

1. Cut one slice of pineapple into small cubes. Put them through the "Health mine." Some finely cut Agar Agar may be added.
2. Soak in a little pineapple juice a desert-spoonful of freshly grated cocoanut. Pound it, put it through a strainer and mix it with the desired quantity of pine apple juice.

3. GRAPE JUICE

Put the grapes through the "Health mine," in order to avoid skin and pips, which should never be eaten.

4. MANGO JUICE

Put the pulp of the mango through a sieve. Serve with a dash of nutmeg.

5. PAPAYA JUICE

Cut some papaya into small pieces. Put it through the "Health mine," beat into it the juice of half a lime.

6. PEACH JUICE

Take one peach, perfectly ripe, and of good quality. The velvety skin should always be removed before eating. Cut the peach into small pieces, put it through the "Health mine," then whip into it a tablespoonful of fresh cream.

7. APPLE JUICE

Grate one apple, without discarding the peel. Add the juice of half a sweet lime, or half a lime. Put it through the "Health mine." Sprinkle with a dash of cinnamon.

8. OATS—APPLE JUICE

Soak one desert-spoonful of rolled oats into two desert-spoonfuls of water, for a few hours. Mix into it the juice of one lime, one

table-spoonful of honey, or soup-spoonful of fresh cream. Grate one apple with the peel, mixing it quickly with the rest. Put through the grinder enough nuts to have a soup-spoonful. Pound it with some lime juice, add it to the other ingredients, and put the whole through the "Health mine."

Instead of the apple, any fruit in season can be used to prepare this drink.

9. DRIED FRUIT COCKTAIL

Soak overnight in some orange juice three prunes, three figs and some raisins, these fruits being finely chopped. In the morning, add the juice of one more orange, and put the whole through the "Health mine."

VEGETABLE COCKTAILS

1. TOMATO COCKTAIL

Cut into small pieces one good sized ripe tomato. Grate half of a fresh small onion, and one small clove of garlic. Put through the "Health mine." Add one teaspoonful of lime juice, and a dash of powdered thyme. Serve when throughly chilled.

The same cocktail can be prepared with French dressing instead of the lime juice only, but then it should be served at once.

2. TOMATO-CELERY COCKTAIL

Prepare the tomato cocktail as above. Before putting it through the "Health mine" add two stalks and leaves of fresh celery finely chopped. Then whip into the juice a teaspoonful of French dressing. Serve at once.

3. SPINACH-CUCUMBER-CARROT COCKTAIL

Chop fine a handful of spinach, grate one small unpeeled cucumber, one golden carrot, a little onion and garlic. Put through the "Health Mine," then whip into it French dressing to taste, and a pinch of powdered ginger. Serve at once.

4. BEETROOT-LETTUCE-RHUBARB COCKTAIL

(*a*) Scrub and grate a middle-sized raw beetroot, chop fine a handful of fresh lettuce. Grate one small stick of rhubarb. Put through the "Health mine." Serve throughly chilled.

(*b*) Grate a middle-sized raw beetroot, one small fresh onion, a small clove of garlic. Put it through the "Health mine." Add one teaspoonful of French dressing and one teaspoonful of lime juice. Mix thoroughly and serve at once.

5. CARROT COCKTAIL

Scrub one nice golden carrot, then grate it and put it through the "Health mine."

(*a*) Mix equal parts of carrot juice and orange juice. Serve thoroughly chilled.

(*b*) Add to the carrot juice the juice of half a lime and a sprinkle of powdered anise seed. Serve thoroughly chilled.

(*c*) Add to the grated carrot some grated onion and garlic, a bunch of fresh parsley, finely cut with scissors. Put through the "Health mine." Add to the juice a teaspoonful of French dressing. Serve at once.

6. TURNIP-LETTUCE-PARSLEY COCKTAIL

Scrub, then grate one turnip, chop fine a handful of fresh lettuce leaves (or any green leaves). Grate a small onion and a little garlic. Cut fine a bunch of parsley. Put through the "Health mine." Whip into the juice a teaspoonful of French dressing. Serve at once.

7. CABBAGE COCKTAILS

(*a*) Chop fine or grate firm small green cabbage. Put through the "Health mine." Mix equal parts of cabbage juice and pineapple juice. Serve thoroughly chilled.

(*b*) Chop fine or grate the cabbage, cut fine a bunch of parsley. Grate one golden carrot, a little onion and garlic. Put through the "Health mine." Then add a teaspoonful of French dressing and a pinch of powdered carraway seeds. Mix well and serve at once.

(*The "Health Mine" is a vegetable grinder, a juice extractor.*)

OILS

Animal oils should not be used because they pollute the blood and are indigestible. For this reason all foods mixed with them partake of the same conditions. The feeding of children with potatoes fried in animal oils is little short of crime, because the results are equal to those of poison. The same is true of meat, white yeast-bread and narcotic beverages. Another objection to the use of animal oil for frying is its liability to become overheated. Burnt fat contains acrolein, an irritating and highly poisonous liquid developed during burning. Vegetable oils will withstand a much higher temperature before burning. Their use in these pages is always intended, and there are many varieties on the market which are prepared especially for culinary purposes. They are much cheaper in the end than animal oils and far more wholesome.

OLIVE-OILS

For table use, salads and for use by invalids, olive-oil only is recommended. For invalids the olive-oil should first be boiled, or cut with boiling water.

COTTONSEED OIL

Because of its cheapnees and wholesomeness this oil is quite in demand and most satisfactory for soups and baking purposes. For making pies it should first be heated and beaten with an egg-beater or fork until foaming. Pastry will be light and very delicious, both in taste and flavour. This oil contains more heat than olive-oil and consequently serves well for frying.

SUNFLOWER SEED OIL

In some parts of the Orient, and also in European countries, sunflower-seed-oil is used for cooking and baking, with satisfactory results. The flavour is unsurpassed and the nutritious value is greater than olive-oil. In countries where made it is as cheap as cotton seed oil, and is thus commonly used. For invalids suffering from pulmonary troubles, and throat and nasal affections, sunflower oil as daily food proves to be an indispensable agent.

IMPROVED SOUP OIL

To give soups a decided flavour and the taste of soup-stock, save all the oil which you have used for frying purposes, putting it in a separate jar. This oil, having been boiled and taken on flavours from the things fried or cooked in it, will gradually change its flavour and prove excellent in the preparation of soups and salads. In liver complaints use oil sparingly and only when acid or sub-acid fruits are being used with the same meal.

OILS IN GENERAL

The question of purity of oil is not so much a scientific as a commercial one, although for medicinal purposes the oil must be just as prescribed. Thus in consumption and rheumatism the patient must use none but the purest olive-oil, while in troubles of liver and stomach, olive and cotton seed oils in equal proportion will prove more satisfactory. In some cases the olive-oil should be used raw, while in others the oil should be boiled in water, and the water allowed to evaporate before the oil will prove of medicinal value. A little experimenting will soon teach the person as to the method to be employed in individual cases.

When breaking away from meat diet a larger quantity of oil will at first be required. Be sure to mix oil with well prepared dishes only. After a time the system will require but little oil, as it will crave nuts in their season.

PEANUT OIL

A peanut product. As a nut in preparation, particularly entrees, it is of value due to the large amount of earth salts, but, as an oil, has to be used with discretion. The oil is somewhat heavy and in stomach, liver, duodenum and kidney troubles must be discarded from our culinary department. Can be used to a great advantage among the physically strong.

INDIAN CORN OIL

Should be used during the cold season only and even then cautiously. For frying it may be used to advantage, but it cannot take the place of the usual cooking oils.

SESAME OIL

May be used the same as cotton seed oil. Keeps well throughout all the seasons of the year. Best for cooking purposes, but not for salads.

COCOANUT OIL

Perhaps one of the sweetest oils of all. Excellent for dressings and for cooking purposes in general. It can be emulsified and a very palatable butter made from it, which is indispensable in cases of stomach, throat and catarrhal troubles. As skin food there is nothing better. Proves fattening when combined with vegetables and grains and works the opposite when used with fruits. An ideal nut food when used judiciously and with a raw-food diet generally. Like any other oil, it will lose its beneficial virtues if used continuously. Must be alternated with other oils in season.

SOUPS

The first course of all dinners should be a soup. It has an appetising and refreshing effect upon the stomach, which is thus fittingly prepared for the work of digesting the more solid foods that are to follow.

Soups should not be taken while hot as they soften the stomach and lay foundation for neuralgic conditions of that organ. They should be allowed to cool to moderate temperature.

Neither beverage nor food should be taken into the stomach while hot. This organ is more sensitive to heat and cold than the mouth, and protests against abuse will be entered for presentation at some future time.

Vegetable oils, such as cotten seed, olive or cocoanut added to soups will give finer flavours than animal oils and finely chopped or ground nuts greatly surpass oxtails and shinbones for making soup stocks.

Ketchup is one of the best condiments for use in flavouring soups, but black pepper or an excess of salt should be strictly avoided. Celery Salt is to be used.

An endless variety of soups will suggest itself as we learn to use our own judgment in preparing them, for the preparation of a good soup is indeed an art. The reason most people do not care for soups is because they have never tasted the fine oil soups which give strength and stamina.

To further vitalise the soups some fresh uncooked vegetable juice such as spinach juice, celery juice, lettuce juice, onion juice, tomato juice, carrot juice and so forth, can always be added just before serving.

1. SOUPS FOR INVALIDS

Just after the siege of sickness, when abstinence from food proves the only successful means of conquering the disease, giving the body an opportunity to recuperate, soup will prove most beneficial. It should be remembered that it is not well to eat bread or biscuit unless the soup is merely a plain combination of oil and water, in which case the bread should be cut into small squares, toasted and the boiling water and oil poured over it.

Invalids should use the broth of soups only, for several days, and later on use the stock.

2. THE BROTH

Of the soups as given in routine may be used after the fast has been broken, adhering to each kind of broth for a day or two before resorting to another.

3. BOUILLON SOUCI

Take a teaspoonful of oil to each cupful of water. Let it come to the boiling point, and thereafter simmer for ten minutes. Salt it to taste after boiling. Take a clove of garlic and rub the warmed bowl or plate with it, rubbing the garlic well into the centre of the dish. Now cut some green parsley into the dish. Pour the boiling broth into the plate, and sip it as warm as you can take it, masticating the parsley well.

The bouillon can also be poured over some squares of whole meal bread, fried in clarified butter.

4. VEGETABLE BROTH

Leek, celery, parsley, clean peels of carrots, turnips, brinjols or any kind of vegetable, hearts of cabbage and lettuce, stems and leaves of spinach can be used to make an excellent broth.

Cook the vegetables, finely chopped, in olive oil with some onion and garlic, for about ten minutes. Then add the desired quantity of water, one bay leaf, one clove, a dash of Cayenne-pepper and salt to taste. Boil for half an hour, then put through the strainer. Such broth, if used instead of water, in the preparation of soups, adds much to their value. Occasionally, a handful of vermicelli or one soup-spoonful tapioca, or arrowroot, or semolina. This broth can also be served with grated cheese.

5. POTASSIUM BROTH

Chop fine two stalks of celery, grate two carrots, one onion and a clove of garlic, cut into thin strips, a handful of spinach and some parsley. Put into a sauce pan and pour over it a quart of cold water. Cook for thirty minutes. Add celery salt to taste and a dash of Cayenne-pepper. Serve hot or cold.

6. WHEAT SOUP A

Fry in oil one grated onion, a clove of garlic, and a cupful of freshly ground whole grain wheat and two tablespoonfuls of ground peanuts or almonds. Let it come to a golden brown, then add one quart of boiling water, one bay leaf, a pinch of marjoram, celery salt and a dash of chilli pepper. Cook for one hour, serve with fresh cream.

7. WHEAT SOUP B

Fry in oil one chopped leek, one chopped stalk of celery, some parsley, two tomatoes cut into quarters. Add one cup of freshly ground whole grain wheat. After a few minutes add boiling water, one bay leaf, and ten ground blanched almonds; cook for one hour. Put through the strainer, heat again, adding salt to taste and a dash of paprika. When serving, add a few drops of lime juice.

8. WHEAT SOUP C

Soak a cupful of whole grain wheat for twelve hours or more. Place it into a saucepan with plenty of water, cook until the kernels burst and a creamy substance exudes (two or three hours). Press through a sieve and heat again, adding salt to taste and a dash of Cayenne-pepper. Serve with cream.

Just before serving, fresh uncooked vegetable juice such as tomato juice, spinach juice, celery juice, carrot juice etc., can be added, in the proportion of one soup-spoonful to a cup.

9. WHEAT SOUP D

Put one small cupful of semolina into the pan, and let it come to a golden brown, stirring continuously. Add one quart of vegetable broth, a dash of nutmeg, and cook for half an hour.

Cut fine some spinach, parsley and celery leaves, grate one carrot and a small fresh onion. Put one table-spoonful of these fresh vegetables into a warm plate, rubbed with garlic, pour over it one soup-spoonful of fresh cream, then fill the plate with the semolina soup, and mix well. Serve at once.

Other vegetables, such as chopped lettuce, tomato juice, grated cauliflower, grated turnips etc., may be used in the same way.

10. BARLEY SOUP

Put half a cupful barley into two quarts of water; add two chopped celery-sticks and a tablespoonful of olive-oil; boil for three hours over a slow fire. Add one whole onion, four middle sized tomatoes cut into quarters, one bay leaf and salt to taste. Cook for half an hour more. Strain and serve with cream.

11. OAT SOUP

Put one cup of rolled oats into a pan and let it brown to a light gold. Then add one soup-spoonful of oil, some finely chopped lettuce and leek, one grated potato and two tomatoes cut into quarters. After ten minutes add one quart of vegetable broth or water, and cook for forty five minutes. Serve with cream and finely chopped parsley.

12. POTAGE SAINT GERMAIN

Cook one pound of fresh peas for about forty-five minutes with three pints of boiling water, adding a few leaves of lettuce, a little fresh or dried mint, salt to taste and a pinch of brown sugar. Then put through the strainer; heat again, adding cream till the right consistency is gained.

This soup is always served with toasted croutons.

Half a pound of dried green or yellow split peas may be used when the fresh peas are not available.

13. CROUTONS

Cut one slice of whole meal bread into small cubes. Fry them in clarified butter, then drain them on a piece of paper. Serve the croutons sprinkled with fresh mint, finely chopped, or dried mint rubbed through a sieve to free it from stalks, arranged on a hot dish lined with a lace paper d'Oyley.

14. LENTIL SOUP

Wash several times one cupful of lentils and let them soak overnight. In the morning change the water, and let the lentils cook on a slow fire until tender. Put into a pan one soup-spoonful of flour and let it come to a golden brown, stirring continuously. Add one soup-spoonful of oil, two stalks of chopped celery, two tomatoes cut into quarters, one onion, one bay leaf and a pinch of marjoram. After five minutes add a quart of boiling water. Mix in the lentils, and cook together for half an hour.

15. POTATO SOUP

Put into a pan one chopped leek, one grated carrot, some chopped celery, sprinkle over it two table-spoonfuls of flour. After a few minutes add a quart of water, one bay leaf, add six potatoes grated with the peel. Celery salt to taste. Cook for one hour, put through the strainer. Serve with cream and chopped parsley.

16. CREAM OF CARROT SOUP

Blanch and put through the nut mill ten almonds. Grate six carrots. Cover with water and cook until tender; rub through a sieve, heat again, adding half a teaspoonful of brown sugar, salt to taste and one cup of cream. Serve garnished with minced parsley.

17. CREAM OF ALMOND SOUP

Put through the nut-mill half a pound of blanched almonds. Place into a double boiler and let simmer slowly in one and a half pints of milk. Add one table-spoonful of clarified butter, one cup of cream and let simmer again until creamy. Season with salt and sweet spices to taste.

18. TOMATO-SOUP

Cook two pounds tomatoes cut into quarters, in one quart of water, with some parsley, one bay leaf, one clove and a few celery leaves. Fry in oil one grated onion, a little garlic, sprinkle over it one soup-spoonful of flour. Mix with the tomatoes, add a coffee-spoonful of brown sugar, salt to taste, a pinch of thyme and some chilli. Put through the strainer and serve with cream and chopped parsley.

FOOD COMBINATIONS.

To attain health and to keep it, to prevent disease and to eradicate it, nature provides a few simple rules; which are not only to be known, but must be observed, if life is to prove a state of joy, happiness and success.

The more man advances the more his constitution calls for scientifically prepared dishes. It is not a question of how delicious the food tastes, but how correct and scientific are the combinations. In the measure that food is properly combined the body becomes free from mucous substances and vitamins in the cells are capable of seeking and finding their own.

Fruits and vegetables supply the mineral or organic elements which play an important part in nutrition, supplying the cells with vitality and the power of resisting disease.

Ripe fresh fruit contains grape sugar in its most assimilable form, and therefore easy of digestion, whereas the grape-sugar present in vegetables is in the form of starch, and although it is transformed to some extent when baked, it takes an appreciable longer time in the digestive process. Consequently, if fruits are combined with vegetables, the digestion of the fruit is retarded and fermentation ensues.

The stomach is divided into two compartments—one deals with the acids which are present mostly in fruits, and the other with the salts and minerals present mainly in vegetables. The walls of the two compartments come forward and attract the constituents of the food received to the appropriate chamber. Where there is an intake of too many mixtures, fermentation arises and results in skin and blood affection.

It is a sound general rule to avoid the use of fruits and vegetables together at the same meal, as such a combination interferes with the digestive processes. Nevertheless, certain fruits may be partaken of with a vegetable meal by the normally healthy without digestive disharmony, provided that no mushrooms or pulses figure on the menu, for example, avocado, apple, banana, citrus fruits,

melon, pear, pineapple and the small fruit berries. Onion combines harmoniously with any of the acidulous fruits.

The bananas, melons, and pineapples come within the category of "transitories", *i.e.*, they fall between the two classifications: vegetables and fruits.

A vegetable may be defined as the product of a plant that matures during the same season in which the seed is sown.

The juices of sweet orange, grape-fruit, grape, pineapple and the small berries, also the juice of baked lemon may precede a meal; the juices of citrus fruits may also figure as an ingredient of a salad dressing in place of vinegar.

Where fruit forms one of the courses of a vegetable meal, it is well to remember that fresh ripe fruits or their juices should PRECEDE and baked fruits should FOLLOW the other courses.

It is not desirable to mix different starches at the same meal, *i.e.*, potato, rice, barley, breadstuffs, maccaroni, etc.. The same rule applies to the fertilizers, *i.e.*, mushrooms and the pulses; also to cheese. The combination of a starch with a pulse is in order; also more than one pulse may be combined together.

When the combinations are inharmonious *the vitamins do not develop* in the process of assimilation.

SANDWICHES

There is no end to the variety of sandwiches which are particularly suited for picnics, parties and travelling. A little attention and interest will soon develop an endless variety of combinations.

When at home, all these sandwiches are very nice served open, but when prepared for picnics, or travelling, a second spreaded slice must, of course be placed on top.

1. VEGETABLE SANDWICHES

Cut slices of whole meal bread either plain or in fancy shapes with sandwich cutters. Cream some fresh butter adding to it a little "Marmite" chopped green onion and parsley. Spread it on the bread and decorate with: Thin slices of red radishes and watercress or finely cut lettuce—or grated carrots sprinkled with French dressing and anise seeds—or grated turnip seasoned with French dressing and a sprinkle of carraway seeds—or thinly sliced leek dipped into French dressing, or slices of cucumber, or slices of tomato, or slices of cooked beetroot dipped into French dressing and alternating with slices of pickled gherkin, etc., ete..
These sandwiches can also be served on slices of whole meal bread fried in clarified butter.

Tartare sauce can be used instead of butter as a spread for these sandwiches.

2. CHEESE SANDWICHES

To a tablespoonful of cocoanut oil, butter, or olive oil, add three table-spoonfuls of grated cheese. Spread between slices of brown bread, having first laid lettuce, parsley or watercress leaves between the slices of bread.

3. CHEESE AND TOMATO SANDWICHES

Grate one cupful of cheese. Mix it with two table-spoonfuls of fresh cream and one finely chopped onion. Spread on slices of whole meal bread, cover with slices of peeled tomato, and sprinkle with finely cut parsley.

4. COTTAGE CHEESE SANDWICHES

Add to the plain cottage cheese some cream, celery salt, cayenne pepper, some lime juice, finely chopped green onions, finely cut parsley and celery leaves, and a little chopped tomato. Spread on slices of whole meal bread, or biscuits such as Vita Wheat—Rye Vita, or cream crackers.

5. ASPARAGUS SANDWICHES

Spread on slices of whole meal bread some Tartare Sauce—*or,* French mustard with cream and butter. Put over them a layer of asparagus tips and decorate with strips of red pimento and watercress.

6. OLIVE SANDWICHES

Take slices of whole meal bread, dip them quickly one side only, in cold water, place the wet sides of two slices together and toast them in a moderate oven until the outsides are a golden brown. Separate the slices, spread on a thin layer of crushed Peanuts, then a layer of grated Gruyere cheese and sprinkle with minced olives; those stuffed with small red peppers may be used if desired.

7. DRIVERS SANDWICHES

Aubergines (brinjols)—or green tomato fritters—pea puree seasoned with Cayenne-pepper and sprinkled with chopped fresh mint laid on fried bread, covered with dressing and sprinkled with chopped parsley—celery chopped and mixed with almond butter—make nice sandwiches.

8. MUSHROOM SANDWICHES

Mushrooms should be cooked quickly in the frying pan in some butter or oil seasoned with Cayenne-pepper, salt, a little garlic and finely chopped onion; add a sprinkle of browned flour and stir well. Mix in equal parts some almond butter and the cooked mushrooms, cooled and finely chopped. Spread on croutons and sprinkle with a little lime juice and chopped parsley.

9. SAVOURY SANDWICHES

Mash fine with a wooden spoon half a pound of peeled tomatoes, add a pinch of sugar, a dash of Cayenne-pepper, a very small pinch of thyme. Put a tablespoonful of olive-oil or cocoanut butter into a heated saucepan. Pour in the mixture, and when hot add a teaspoonful of flour which has been worked to a cream with a little cold water, boil until thickened, and set aside to cool. *Put* on slices of whole meal bread which has been spread with nut butter, and decorate with chopped fresh herbs.

FRUIT SANDWICHES

10. FIG SANDWICHES

Put into a double boiler half a pound of well-washed figs, a tablespoonful of brown sugar, half a lemon or one lime, and a cupful of water. Cook until tender, then strain, chop the figs very fine and add to the juice. Take twelve slices of whole-meal-bread, dip

them quickly, one side only, in cold water. Place the wet sides of two slices together and toast them in a moderate oven until the outsides are golden brown. Separate the slices and put a thick layer of the fig filling between each two; press lightly together and set away to get cold.

11. APPLE SAUCE SANDWICHES

Fry to a golden brown slices of whole-meal-bread in clarified butter. Sprinkle while cooking with ground cinnamom. When cool, spread over them a layer of apple sauce; cover with a layer of whipped cream and a "dust" of cinnamon.

12. RAISIN-NUT SANDWICHES

Chop fine half a pound of seeded raisins and grind half a pound of walnuts. Moisten with two table-spoonfuls of grape juice then spread upon slices of bread or Rye Vita biscuits.

13. FRUIT SANDWICHES

Chop fine a quarter of a pound each of candied cherries, seeded raisins, and dates; add a quarter of a pound of ground cocoanut, two table-spoonfuls of grape-juice, and the juice of half an orange, and mix all well together. Spread almond butter on slices of whole-meal-bread, follow with the fruit.

14. GINGER SANDWICHES

Take eight slices of bread: dip quickly one side of each into cold water, lay the wet sides together and roast to a golden brown in moderate oven. Separate the slices and put between them a filling composed of four lettuce leaves and half an ounce of candied ginger cut into small slices.

15. RAISIN-CARROT-COCOANUT SANDWICHES

Chop fine half a cup of seeded raisins and soak them in orange or lime juice. Spread upon Vita Wheat or Rye Vita biscuits, or slices of brown bread, toasted as for the above recipe. Put on top a layer of freshly grated carrot and finish with a sprinkle of ground cocoanut.

16. PINEAPPLE SANDWICHES

Shred one slice of pineapple, chop fine four dates and four candied cherries. To half a cup of plain cottage-cheese add two table-spoonfuls of cream and a teaspoonful of pineapple-juice. Mix all together and spread upon sponge-fingers or raisin-bread.

17. HONEY-ALMOND-SANDWICHES

Put through the nut mill two ounces of blanched almonds, then mix with two ounces of pure honey. Spread upon slices of whole

meal bread or Vita Wheat biscuits. Finish with a sprinkle of freshly ground pistachio nuts.

18. WALDORF SANDWICHES

Prepare two cups of diced apples adding some lime juice to prevent them from turning dark. Mix with it one cup of diced celery and half a cup of dressing. Prepare some slices of whole meal bread as explained in recipe 14. Separate the slices and place upon them some nice lettuce leaves. Follow with the prepared mixture and finish with a sprinkle of freshly ground walnuts.

CREAMS AND DRESSINGS

1. SIMPLICITY DRESSING

Into a cold salad bowl put three table-spoonfuls of olive-oil, two table-spoonfuls of lemon juice, one tablespoonful each of onion juice and chopped parsley, a dash of Cayenne-pepper and of salt. Instead of olive-oil lightly melted butter may be used, but in that case omit the onion juice.

2. FRENCH DRESSING

Put into a bowl half a teaspoonful of salt, half a teaspoonful of mustard, and a dash of Cayenne-pepper ; add gradually six table-spoonfuls of olive-oil, stirring constantly ; then add very slowly, while stirring, one tablespoonful of lemon or lime juice. One advantage of this dressing is that any kind of flavouring may be added, such as Worcestershire or Tobasco Sauce, ketchup, onion juice, garlic, chutney, etc..

3. SAUCE TARTARE

Chop very finely four olives (stoned), one tablespoonful capers, one gherkin, and mix with one cup of rich dressing.

4. NUT CREAM

Take three table-spoonfuls of pine kernels, six blanched almonds, four walnuts and one Brazil-nut : grind them fine. Add enough lemon-juice to make a cream and let it stand four hours, or over night, before using.

This cream may be used in connection with any fruit, or vegetable-salad.

CONDIMENTS AND SPICES

GREAT danger attends the frequent use of stimulating condiments, and the digestive organs may be so habituated to their presence that plain food seems insipid. Such conditions cause a perversion of the appetite, and a long train of evils follows. Spicy condiments afford no nutrition and are not essential to the process of digestion in a healthy state of the system. Though they may in some cases assist the action of a debilitated stomach for a time, yet their continual use never fails to produce a weakness of that organ, the effect being the same as that of alcohol or other stimulants—present relief at the expense of future suffering.

Black and white peppers and nutmegs are active poisons and produce dangerous results, even in small quantities. Use as a medicine only and in season.

Cloves, allspice, mace and cinnamon should be used sparingly.

Red pepper, ginger and salt have medicinal properties and their use in moderate proportions is very beneficial.

Vinegar should not be used, as the acetic acid which it contains is highly injurious to the delicate lining of the stomach. Only on rare occasions vinegar made from sound apples, and *boiled* before using, may prove beneficial. As a disinfectant vinegar is of great value. Bathe body with vinegar and water in equal proportions in cases of *fever*. In food use lime or lemon juice *instead of vinegar*.

The use of savoury herbs, such as thyme, parsley, sage, sweet marjoram, mint, garlic, leek, chives, yarrow and carraway, celery and dill seeds in soups, salads, sauces, etc., is very beneficial and acts as a very mild stimulant.

The following spices, if used sparingly, will prove beneficial, and especially when combined with fruits: cinnamon, mace, saffron, nutmeg, cloves, allspice, citron, lemon, orange, vanilla and other fruit-flavouring-extracts. Savouries should be avoided as much as possible.

IMPORTANT HINTS

Whenever fruit-juices are used in a soup it is well to use nutmeg, mace or other spices to give it a mild flavour.

When using vegetables it is best to rub the soup plate with a little garlic.

Soak bay-leaves in water for several hours and use the liquid for flavouring soups.

Finely chopped parsley also plays an important part in soup-making.

To have good results in preparing raw foods, it is well to first decide upon a menu. Then prepare stock for your soup. If you desire to prepare consomme or bouillon you can use the dregs of your soup as a base for your savoury by simply adding such nuts and grain flakes as you prefer.

Always prepare the things required for salad beforehand so that sound "leavings" may be used in savouries.

All nut creams, sauces and dressings should be thinned down with sweet cream just before serving.

In raw-food-dinners the juice of pineapples, lemons and oranges may be used for flavouring when vegetables, grains, and nuts are to be the body of meals.

When fruits, cereals and nuts are decided upon for a meal, the juice of garlic, onion or rhubarb may be used. Use no savouries with fruits. Confine yourself to spices or other flavours.

Small fruits like strawberries, blueberries, raspberries, currants and gooseberries may be used with either a vegetable or fruit meal.

Remember, that the body, to keep it in good humour, needs change in diet, not only in accordance with the season, but it calls for even more frequent change.

Mastication the Key to Digestion

Thorough mastication of food insures a greater percentage of digestion and assimilation. Thus *masticate thoroughly*, whether it be solids *or* liquids.

In masticating our food well the absorbants of the mouth, tongue and palate concentrate all of the aromatic *spirit substances* of foods, thereby aiding and increasing the insalivation of foods for digestive action.

What you fail to absorb by virtue of mastication you never get after the food reaches the stomach. Food proves a vitaliser and energiser only then when absorbed by continued and well-directed *exercise of the jaws.*

The sense of taste, harmonised and in common with all the senses directed by reason, is the guide unto selection, mastication, digestion and assimilation of foods which will prove of benefit and wholesomeness *to the body, mind, soul and spirit in general.*

We must be able to taste the food with our mouth and retain such taste until the food, by mastication, becomes tasteless. It then may be swallowed and left to the stomach to draw from it whatever soil substance it may retain for metallisation.

It is not the stomach, liver and kidneys that need our consideration, but the *mouth*, which is the feeding station of our organism. Masticate your food to such an extent that the fluids furthering digestion will form readily and then assimilation is assured.

Through proper mastication you become thoughtful, for as like begets like, you retain the good thought of the food.

WORK AND OVERWORK

There is work and overwork; such a thing as overwork, means work performed in a position limiting the exercise of the body and change of mind.

We never do too much work where we make a change in occupation for the performance of some other duty.

We condemn ourselves if we look upon labour as the end of things, or the only means of sustaining soul and body. Under such conditions our labours become a burden and a curse. The greatest of blessings come to him who performs his daily work in the spirit of duty and honour—remembering the power of breath.

Work is nature's means to exercise the body as directed by the mind to insure satisfaction unto the soul.

All work of usefulness to the labourer and for the good of all is the only means of salvation from the curse of negative ancestral tendencies and the path that leadeth unto the goal of final emancipation.

It rests the body and mind to *frequently change attitude* in the performance of our labours.

The digestion and assimilation of foods does not depend upon our knowledge of the organs of the body nor upon chemical compounds of foods, but *the selection* of foods as Nature furnishes them.

SCIENCE OF DIETETICS

GENERAL PRINCIPLES

The body is comprised of sixteen elements: oxygen, carbon, hydrogen, calcium, nitrogen, phosphorus, chlorine, sulphur, fluorine, potassium, sodium, magnesium, iron, silicon, manganese and iodine.

These elements are a vital necessity, in order that the body may be able to perform its physiological functions of digestion and assimilation, secretion of the glands, elimination of the poisons from the blood-stream and the waste-matter from the system.

Therefore, in order to keep the body in a state of health and immune from disease, the blood must contain these elements in balanced proportions, in as much as through the blood they are conveyed to all parts of the body to perform their particular function.

The saline substances contained in food are the only medium that holds life to the body, and what is needed is food so compounded that it will readily give up its saline properties in order that it may renew, re-quicken, and extend the operations of cellular life.

Instead of eating to appease and please appetites, attention should be directed to the selection of food and drink conducive to the formation of vitamins and leucocytes, the one sustaining cell-life, the other feeding the tissues. Both substances are supplied through salines formed from food and *directed* by the power of the *spirit gained in breath* and breathing.

VITAMINS

Vitamins are the procreative forces in a process of assimilation, etherealizing the harmones toward charging the blood and vitalizing the nerves. Therefrom are created the saline substances which are carried and distributed, becoming converted and reconverted or transmuted at last into ethereal substance. It is this substance created by salines which the ether makes use of, passing it through the cellular side, quickening the circulation and nerves, and lastly through etherealization it enters the glandular system, thus reviving and renewing the glands.

RYTHMIC BREATHING

The importance of rythmic breathing in the attainment and maintenance of health cannot be over-estimated. The more rythmic the breathing, the less food will be required, and what is consumed will be more perfectly digested and assimilated. Imperfect assimilation indicates that rythmic breathing is not being practised in a systematic manner.

THE SELECTION OF FOODS

In selecting food, it should be of a kind that can be easily digested and assimilated, so as to cast no burden upon the various organs of the body—relieving the circulatory, nervous and glandular systems of all tension. In the words of Plutarch, "The body should sit light and easy around the soul."

Food furnishes only the soil substances necessary for the formation of cell tissues, of which little is required, whilst strength and vitality depend upon the organic action set into operation by the compounds absorbed from the elementary domain through the power of breath. It is breath which supplies the system with the elements required for the perpetuation of the organism and the action of thought through the generation of electric fluids upholds the system.

Partaking of little food, and while doing so contemplating upon every move through the process of mastication, *will call out* the life substance or *the spirit essences of the food*, transmitting them into remedial agents, healing to the body and soothing to the mind.

The more studious one becomes, the more varied the mental attitude, the more the functions of the body are under control, the less food one craves.

Thorough Mastication is essential, as it not only stimulates the salivary glands and induces them to yield their precious substance but enables the aroma of food, which is the spirit thereof, to enter the system through the soft palate. When food is only half masticated, very little saliva flows and many physical ailments follow as the result of imperfect assimilation.

All solids should be masticated thoroughly until tasteless. All liquids should be drawn between the teeth and turned in the mouth several times before swallowing. Then, keeping the mind upon the task in hand, entertaining ideas of the highest possible nature appertaining to food value, mastication and assimilation—less food serves to satisfy the appetite.

It is not the amount of food consumed which ensures the substances necessary to perpetuate the building of tissue, but the *assimilation* thereof and its proper direction by intelligence arising from controlled breath.

PREPARATION OF FOOD

Food should be prepared in congenial surroundings with love, consideration and alertness, but without haste, so that those who partake thereof may derive the maximum amount of benefit therefrom. Haphazard and hasty preparation deranges the digestion of the more highly organized. On the other hand, the preparation of food is not to be long drawn out and it is not to be overlong cooked.

Artistic dishes, beautiful surroundings and a contented mind go a long way towards making one happy, and happiness aids digestion and assimilation. Happy thoughts draw the spirit out of food partaken of and one benefits accordingly.

The origin of prayers before meals was that they should serve as rythmic out-breathing exercises to prepare the digestive organs to receive the food, while heart and mind were filled with thanksgiving for the gift of all heavenly blessings. Prayers are equally appropriate in these days, in recognition, appreciation and thankfulness for all the wonderful and exquisite provision made through nature by Infinite Intelligence.

RAW FOOD

The Mazdaznan Science favours simplicity and Economy and holds that a rapidly progressing individual outgrows readily and easily all of the complications in food matters, leaning more and more to the simple foods as nature furnishes them, selecting as necessity demands and with as little preparatian as possible. A little practice will develop a gift for limitless combinations.

INDIVIDUAL PROGRESSION is developed through power of *breath:* conscious and rythmic breathing; breathing in posture.

DIETARY IN A NUTSHELL

HOW TO EAT AND DRINK

The sum and substance of all the science of dietetics is this:—

When on a fruit diet, you should blend the sweet fruit with a smaller percentage of sub-acid or acid fruit.

When on vegetable diet, the earth salts which are sweet in taste and flavour must be subdued by the addition of vegetable juices of an acid or sub-acid nature.

When on a nut diet, the nuts must be thoroughly masticated, and the pulp, absolutely tasteless and gummy, should be expelled from the mouth.

When on a grain diet, the grain must be used raw and well masticated, employing the jaws to a great extent, but do not swallow more than one third of the pulp.

When living on a mixed diet, remember that grain gives substance, while the addition of a few nuts occasionally or in season adds heat. By using the fruit at one time and the vegetables at another, they will furnish the eliminative tendencies.

Live on grains and vegetables for a day or more, then alternate with fruits for the same period, more or less, in accordance with the condition of the organic action.

If the system is filled with acids it is best to abstain from fruits. If laden with salts and minerals, then it is best to abstain from vegetables until the system is adjusted to a greater degree.

Never cater to artificial wants. They are mere suggestions of abnormal conditions that enslave our higher natures and burden our life energies with unnecessary trouble. There is no possibility of overcoming these unless we retrace our steps and return to nature with a humble spirit and a contrite heart.

Learn how little it is necessary to eat and how much less you need to drink, as thereby you will learn the secret of the science of right living, which is the key that unlocks the problem of all questions of life—the question of the economy of the Infinite through individual effort.

Appetite is the result of uncontrolled senses and a disease of organic intelligence.

Stop eating for a time and nature will do the rest.

Hunger alone, following a day's good work, determines perfect digestion of that food which is least inviting to a pampered palate, but of value to him who knows of its virtues.

The greater percentage of the juice of fruits and vegetables is superior to the water of mineralising tendencies, for the reason that by virtue of an evolutionary life the liquids of vegetation embody the intelligences of superiority, also by experiences in the realm of growth which entertain eliminating tendencies, which the best of waters do not possess.

Nature's process of distilling water can never be equalled by scientific innovations, as nature has a chemical laboratory at her command that is guided by unseen hands and directed by a mind which alone can claim master-ship. All else is mere imitation, full of error and ignorance. If you need liquid pure and undefiled, take fruits or vegetables in their natural state and you will learn to glorify Him who has created and formed it so wisely.

Whenever overcome by thirst we shall know we do not exhale enough and that we inhale too short a current of breath to induce oxidization of the blood, and consequently we do not eat our food attentively and with discrimination. The organism contracts consummative tendencies, creating the thirst for liquids, which liquids, when taken, dampen the consummation temporarily, but at the same time create gases deterimental to organic action.

By abstaining from condiments, artificial sweets and seasonings, eating only grains, fruits, vegetables and nuts as nature furnishes them, we never thirst for water or liquid of any form, as breathing will be sufficient.

HEALTH RULES

Eat only when absolutely hungry.

Do not eat an early breakfast, or immediately after arising from a night's rest.

Always work for several hours before partaking of food.

Instead of drinking any water, a little juicy fruit may be taken in the morning. The fruit should be eaten very slowly and masticated until tasteless.

Never eat nuts or any other oily foods unless hungry.

Too many nuts and too much raw oil will cause eruptions of the skin, pimples, sores, blotches, etc., as will also too many sweet fruits, particularly the dried kinds. Eating too much cream, cheese and butter, (as well as eggs, for those who take eggs) will produce the same effect.

When bowels get too loose, avoid fruits and vegetables and use nuts and grain preparations only. In case the looseness of the bowels causes aches and pains, use a little browned flour, or make browned flour gravies, (season with savourys and herbs) and use with your meals.

Do not drink with your meals. If eating slowly and mixing solids with the saliva no drink will be required.

Never mix vegetables and fruits together at one meal. Keep them separate—different meals.

You can have grains, nuts and fruits at one meal—then—grains, nuts and vegetables at another meal.

Use nuts in very small quantities at a time and use them rather regularly, combined with other foods.

Do not eat when served in rather unpleasant surroundings and a spirit of depression prevailing, nor food prepared by persons of a hasty and uncontrollable temperament, as the food, however pleasant to the plate, will be a detriment to the system.

Do not eat unless you have earned your meal, unless you are assured and certain you are entitled to the same.

THE TRUEST AND NOBLEST EFFORT OF MAN is to outgrow the animal and to recognize the human; to conquer all the tendencies of brute nature. To this end our attention must be directed toward the generative action of the nervous system at large, whose office is to manifest the operations of the mind by inductive and conductive actions into the muscular, or expressing part of being, and to carry out the desires of our innermost being. To insure such a process one must adhere to the simplicity of that life which asks, by performance of hard labour, for "daily bread" even though it be "crumbs that fall from the rich man's table," and is refreshed by wine that flows from the "jug filled with water". Living thus and working unselfishly, taking interest in all things and using judgment in one's selection of labour whenever nature demands change, observing as to food "each kind in its season" as "each season brings forth its own kind," we shall answer the purpose of life and may safely look into the future before us.

YOGA

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Editorial Notes

Pioneer and Plagiarists

THE very first observation made by Dr. Sir S. Radhakrishnan, the Vice-Chancellor of the Benares Hindu University, during his recent visit to the Institute only a few months ago, was with regard to the confusion created by various claimants in the field of scientific Yoga. In our previous issues, we have repeatedly drawn attention of the interested public and the scientists to this unpleasant fact. When the plagiarists pretend to be the pioneers, it is always the good cause that suffers; and, no better example could be quoted than the case of this pioneering Institute.

Notwithstanding the historical truth based on documentary evidence showing how, nearly a quarter of a century ago, this Institute pioneered *the scientific Yoga movement*, claimants of various types both societies and individuals---involving even a foreign university, a local Government and mixed political and other interests—have exploited public ignorance and credulity. Even the services of the Press and the popular leaders have been secured, in certain instances, to carry on such unyogic propaganda. Of course, there is no law prohibiting anyone from making untrue or wild claims and the spurious teachers of scientific Yoga could not be bound over as exceptions.

But why not leave them alone to be judged by posterity? For what actual harm can they do to the cause of Yoga science? This is the real issue which needs clarification for, indeed, by their activities, *in the present*, they prejudice the cause by debatable technique and exaggerated claims quite unsupported by textual data or precise scientific evidence. Besides making the work of this Institute more difficult, it also gives wide currency to many unauthorized ideas and unscientific evaluation of Yoga technique. By their actions, the cause of scientific Yoga suffers. And, while we hold no personal prejudices against any one single society or individual, their malpractice has been very seriously objected to and criticised by us all along. It is therefore not surprising that even a highly discriminating intellectual like Dr. Sir S. Radhakrishnan could not escape this confusion created by a variety of claimants who have tried to merely imitate this Institute.

Experiments at Yale University

To illustrate our previous objections, here is a concrete instance of an unwarranted authority. Introducing a book on Yoga, in a "communicated" review submitted to the Press in India either by the author, the publishers, or the department of the Yale University (U. S. A.) where these experiments were conducted on Yoga, it has been stated that "Yoga has for the *first* time been fully described and appraised from the standpoint of science." And, this audacity in the year 1937—*nearly two decades after* such a movement was pioneered and standard work of reference published by this Institute! It is unfortunate that due credit is not given where due. But in the meantime the name of the Yale University in bold print must confuse many.

Who is this impertinent author who claims to have learnt sufficient Yoga in one year to enable him to conduct *scientific researches* simultaneously and pronounce his opinions and conclusions in the next year? The very pretence is shocking for no one has yet claimed mastery over intrinsic science of Yoga within such a short period to enable him to speak with authority. It had taken us fifteen years before we undertook the responsibility of communicating our scientific findings matured through years of repeated experiments. But here is a graduate of the Calcutta University who, according to the propaganda literature of his yoga teacher, toured the whole of India in search of a yogin and finally decided to study under him. During his search, we never heard from him directly and we believe he conveniently forgot the very existence of this oldest institution.

Incidentally, during one of our discussions, it was revealed by Dr. Surendra Nath Dasgupta of the Calcutta University that this research student of the Yale University was to receive his theoretical training in Yoga under him for a few months but that, except for a casual visit, he (Dr. Dasgupta) did not hear anything further of him. As to the credentials, the accuracy of technique and the so-called scientific researches of his yoga teacher, we have already proved beyond a shadow of doubt that these are in parts highly misleading and unauthentic. Like teacher, like student; and it is no wonder that his experiments—contrary to the traditions of the ages—did not help him "to prove or disprove that these practices would in the long run improve such intellectual processes as memory, logical acumen etc."

We highly appreciate the enthusiasm of the Director of the Institute of Human Relations at the Yale University to arrange for such scientific experiments on Yoga, but we regret to observe that the results of these experiments may have to be regarded as dubious in view of the fact that the subject himself had debatable training in, perspective of, and habituation to Yoga as enjoined by traditions and also essential for precise scientific researches.

Christian Prejudice against Yoga

No sooner did *science* of Yoga begin to attract attention of the intellectuals and scientists in the West, a somewhat coördinated move for counter-propaganda to undermine this popularity seems to have been inaugurated by a section of interested writers, journalists and organizations. The only way they could do this successfully is through repeated misrepresentations of the true fundamentals and technique of this scientific culture. We have before us a pile of such literature published for the benefit of the Westerners. Like the variety of claimants who have disserved the cause, these writers have equally prejudiced many unwary readers. Most of these writers happen to be Christians by religious belief; and none of them appear to have had any traditional training in academic or scientific knowledge of or prolonged subjective experience in Yoga. Their unfounded criticism is thus mainly confined to details of theory and transliterations and does not touch the actual yoga reactions on a normal human being uninfluenced by racial, national, religious or other complexes. The sum-total of their scare-mongering plea is that "Yoga is unsuited to the Western mind."

In an article entitled "Yoga" published in *The International Review of Missions* (Vol. XXIV, No. 95), Rev. G. W. Briggs has given a rather confused exposition of the subject and offered his premeditated conclusions. "In short," according to him, "from the *Christian point of view*, the chief asset of Yoga consists neither in its method nor in its philosophy, but in its strong will to search out and to find peace (*śānti*)." One wonders whether this is commendation or condemnation. Viewed as either, it lacks strength—as a compliment, it is obviously left-handed, and as a reproach, it is unfair. For Yoga rests on a higher claim—that of scientific synthesis in culture in which all humanity is interested—rather on its ability to guarantee satisfaction to any particular religion, least of all the Christian. His statement that "Yoga offers no adequate satisfaction from the *Christian* point of view" is in complete harmony with the avowed object of prejudicing his readers, mostly Christian missionaries, and the "Editorial Notes" lends ample support to this. For it reads "The Rev. G. W. Briggs was a missionary and is now a teacher of the comparative study of religion and missionary subjects at New Jersey, U. S. A. *His scholarly article will be invaluable to those who are attracted by the vogue which the Yoga cult has come to enjoy in the West.*"

Apart from his conclusions, what Rev. Briggs writes as facts about Yoga practices is so palpably incorrect that we should perhaps ascribe his statements, though earnest, to those "books and lectures current in the West" a general survey of which, he says, "reveals much vagueness, considerable ignorance and a general reticence concerning certain aspects of Yoga and the meaning of terms."

While he has sought to quote the views of Professors Dasgupta and Radhakrishnan and also dips frequently into references about Patañjali and Haṭhayoga, the general trend of his presentation is to discredit yoga practices as rather repugnant to a refined taste. The effect of this, whether Rev. Briggs meant it or not, is to give a colour to his survey which is obviously prepared for the purpose of fitting in with his conclusions. There is also too much of insinuations regarding sex by mixing up the theory of male and female energy of the śākta school, much more than a dispassionate study of the science of Yoga can ever warrant. Considerable confusion about terminology—a confusion which perhaps explains the elaboration of unauthorized assumptions—also is apparent. Patently inaccurate interpretations like

"destruction" for *nirodha*, "release" for *kaivalya*, "contortion" for *mudrā*, "stoppage" for *bandha* and many other symbolic terms not only indicate scholastic misadventure but also expose lack of perspective, of sympathy, and of experience prerequisite to any rational discussion.

What we would like to understand is why these people should write upon subjects about which they know so little instead of leaving it to those who have specialized in this branch of learning by devoting their whole life to the study of its theory and practice? Of course, those who are desirous of misunderstanding Yoga are quite welcome to do so, but we do not want it to be misunderstood either wantonly or otherwise. Yoga has got to be freed from a mass of prejudice, a prejudice that exists both in India and outside India, a prejudice that has its roots in ignorance and in a wilful desire not to understand it.

Board of Yoga Science

Such irresponsible and disjuncted movements, not to talk of the many ill-conceived activities of the small vendors of Yoga, emphasize the most urgent need for the establishment of a Board of Yoga Science to promote, guide and authorize all scientific Yoga activities. This can be achieved only through voluntary and intelligent coördination between scientific students of Yoga all over the world, by standardizing practical Yoga technique, education, and literature and by inauguration of Yoga College where qualified training both in theory and practice of Yoga is imparted. We repeat our appeal to all earnest lovers of Yoga throughout the world for their suggestions, contributions, and coöperation for due fulfilment of the above objects. Ours is like a lone voice in the wilderness, but if the noble cause of scientific Yoga for the benefit of humanity is to go forward successfully, the earlier these essentials are provided for by the public or the State the better.

Old Life Members

All the thirty-three old Members of The Yoga Institute (as per List last printed in the previous issue of *Yoga*), Bombay, are hereby informed that, on the 27th September 1939, this Institute was duly registered under the Societies Registration Act XXI of 1860, under the permanent Constitution. Printed copies of the *Memorandum of Association, Rules and Regulations* had already been supplied to every member. Their attention was also drawn to the Resolution No. 6 of 1939, a copy of which was circularized to all members immediately, granting them the option to fulfill Rule No. 2 (*c*) of the permanent Constitution. The names of those who have responded appear in the present issue. Those who have not done so retain their relationship personally with the Founder, and the new publications of the Institute as they appear shall be supplied to them as usual with his best compliments.

Our Subscribers

We admire the patience of our subscribers who paid their subscriptions for the Vol. IV in 1937 and have silently waited for nearly five years, without a complaint, to receive their last issue. Our economic position continues to be unsatisfactory, and while we do not propose to discontinue this journal, its appearance is likely to be irregular. If you believe that our cause is right and it deserves your support, you may send in your subscription for Vol. V (according to the revised rates as per the advertisement elsewhere). We will appreciate if you will recommend it to those who are likely to be interested for it will give us strength to bear our burden.

Change of Headquarters

It has been resolved to shift the headquarters of the Institute, for the duration of this war, to the interior at Kachholi, District Surat.

SITA DEVI
Secretary

Upaniṣadbrahmayogin and Haṭhayogapradīpikā

[*The Bibliography of the Published Writings* of P. K. GODE, M.A., Curator, Bhandarkar Oriental Research Institute, just published, containing over 200 papers on Indology during twenty-five years of historical research bears ample testimony to his industrious scholarship. Not only in dealing with debatable chronological data but also in other branches of Indian culture, his contributions have supplied valuable material for further researches. Their scientific approach and reliability make them invaluable to the oriental scholars.

In this article, Prof. Gode assigns a tentative chronological date to Upaniṣadbrahmayogin, the commentator of the 108 Upaniṣads. In doing so, he has mainly relied upon the relative date of the author of *Haṭhayogapradīpikā*. Since most of the Haṭhayoga texts have copiously borrowed from each other, it is extremely difficult to assign definite dates to these works based solely on inference or priority. This article was received by us 2 years ago. We are now informed by the author that he has "since gathered evidence to prove that Upaniṣadbrahmayogin flourished about 150 years ago." The relevant material is expected to be published shortly in a special paper. Regarding the meaning of the word *haṭha*, we beg to draw attention of the readers to the issues of this journal Nos. 5-6. For advaitic bias in the interpretation of Haṭhayoga, refer to "Essentials of Vedānta Yoga" in *Yoga* Vol. II, pp. 103-110. It may be pointed out that not only the twenty (Neo) Upaniṣads deal with Yogaśāstra but also the other earlier Upaniṣads equally treat of some aspect or practice of Yoga.—ED.]

THE *Muktikopaniṣad*[1] appears to be the only *Upaniṣad* which enumerates the 108 *Upaniṣads*. This number includes 20 *Upaniṣads*,[2] which treat of yoga and a study of which is essential for all students of the history of the *yogaśāstra*. The only commentary by a single author on the 108 Upaniṣads is that of Upaniṣadbrahmayogin, published for the first time by the Adyar Library. This commentator closely follows the commentary of Śaṁkarācārya for such of these Upaniṣads as are commented on by the great Advaitin. His *advaitic* bias is fur-

1. *The Sāmānya Vedānta Upanishads*, Pub. by Adyar Library, 1921 pp. 349-50. Verses 30 to 39 enumerate 108 *Upaniṣads* and this list is concluded by the remark :—

"एवमष्टोत्तरशतं भावनात्रयनाशनम् । ज्ञानवैराग्यदां पुंसां वासनात्रयनाशनम्"

2. These 20 Upaniṣads have been published by the Adyar Library (1920) in a separate volume called *The Yoga Upanishads* with the commentary of the Upanishad-Brahma-Yogin, containing the following Upanishads :—

(1) अद्वयतारकोपनिषत् (2) अमृतनादोपनिषत् (3) अमृतबिन्दूपनिषत् (4) क्षुरिकोपनिषत् (5) तेजोबिन्दूपनिषत् (6) त्रिशिखिब्राह्मणोपनिषत् (7) दर्शनोपनिषत् (8) ध्यानबिन्दूपनिषत् (9) नादबिन्दूपनिषत् (10) पाशुपतब्रह्मोपनिषत् (11) ब्रह्मविद्योपनिषत् (12) मण्डलब्राह्मणोपनिषत (13) महावाक्योपनिषत् (14) योगकुण्डल्युपनिषत् (15) योगचूडामण्युपनिषत् (16) योगतत्वोपनिषत् (17) योगशिखोपनिषत् (18) वराहोपनिषत् (19) शाण्डिल्योपनिषत् (20) हंसोपनिषत्

ther illustrated by the following explanation of the term हठ (in the expression *हठयोग*) in commenting on the 45th verse[5] of the *Yogatattvopaniṣad*, which describes a Yogī who has attained *siddhi* or perfection as follows :—

"नासौ मरणमाप्नोति पुनर्योगबलेन तु ।
हठेन मृत एवासौ मृतस्य मरणं कुतः ॥ ४५ ॥"

The Commentator explains this verse as under :—

"मरणादेः देहनिष्ठत्वेन योगिनो देहातीतत्वात्, "न जायते म्रियते वा विपश्चित्" इति श्रुतेः। **ब्रह्मातिरेकेण देहादिकं नास्तीति बोध एव हठः, हठेन सम्यग्ज्ञानेन** मृत एवासौ देहः"

We wonder if this equation "हठ = सम्यग्ज्ञान" would be acceptable to the students of Sanskrit philology as also of the *Yogaśāstra*.

Our Commentator quotes from a treatise on the *Haṭhāyoga* and calls it by the name हठतन्त्र in the following extract from his Commentary on verse 73 of the *Brahmavidyopaniṣad*[4] :—

"यद्वा–गोशब्देन जिह्वोच्यते। तथा च **हठतन्त्रे** आम्नायते—**"गोमांसं भक्षयेत्"** इत्यंशविवरणे **"गो शब्देनेरिता जिह्वा"** इत्युक्तत्वात्"

In the above extract the Commentator refers to two consecutive verses in a work on the *Haṭhayoga* (हठतन्त्रे). We have been able to identify these two verses in the *Haṭhayogapradīpikā* of Svātmārāma. They are identical with verses 47 and 48 of the 3rd Chapter (तृतीयोपदेश) of this treatise[6] and read as follows :—

"गोमांसं भक्षयेन्नित्यं पिबेदमरवारुणीम्।
कुलीनं तमहं मन्य इतरे कुलघातकाः ॥ ४७ ॥
गोशब्देनोदिता* जिह्वा तत्प्रवेशो हि तालुनि।
गोमांसभक्षणं तत्तु महापातकनाशनम् ॥ ४८ ॥"

(* Upaniṣadbrahmayogin uses the variant (ईरिता for उदिता)

The manner in which two consecutive verses from the हठतन्त्र have been referred to by our commentator and their exact identification in the *Haṭhayogapradipikā* in the same order appears to indicate that the हठतन्त्र referred to by our commentator is identical with the *Haṭhayogapradīpikā* of Svātmārāma, a standard work on the Haṭhayoga. This conclusion of ours finds further corroboration in another reference to a 'हठयोगतन्त्र' which is found in our commentator's explanation of verse 128 of the *Yogatattvopaniṣad*[6]. This verse reads as follows :—

"अमरीं यः पिबेन्नित्यं नस्यं कुर्वन् दिने दिने ॥
वज्रोलीमभ्यसेन्नित्यममरोलीति कथ्यते ॥१२८॥"

This verse is identical with the following verse in the *Haṭhayoga pradīpikā*[7] (verse 97 of तृतीयोपदेश)—

"अमरीं यः पिबेन्नित्यं नस्यं कुर्वन्दिने दिने।
वज्रोलीमभ्यसेत्सम्यक्सा ऽमरोलीति कथ्यते ॥ ९७ ॥"

The only difference in the two verses quoted above is of the reading "नित्यम्" for "सम्यक्सा" but this is negligible. This identity of the two verses, one in the *Yogatattvopaniṣad* and the other in the *Haṭhayoga pradīpikā* raises the question about

3. *Yoga Upanishads*, Adyar, 1920, p. 400.
4. *Yoga Upanishads*, Adyar, pp. 264-65.
5. *Haṭhayogapradīpikā*, (T. P. H. Adyar) 1933, pp. 114-115.
6. *Yoga Upanishads*, p.
7. *T. P. H. Edition*, p. 141.

the relative chronology of the two works. This question, however, cannot be decided at present for want of additional conclusive evidence on the point. As some of the Upaniṣads are quite late it is difficult to say whether the *Haṭhayogapradīpikā* has borrowed the verse under reference from the *Yogatattvopaniṣad* or *vice versa*. Then again the argument of a common source for both these works cannot be ruled out of this discussion.

What concerns us here, however, is our commentator's explanation of the above verse and his introduction of another verse from a 'हठयोगतन्त्र' as under :—

"तथा च **हठयोगतन्त्रे** अभिहितम्—
पित्तोल्बणत्वात् प्रथमां च धारां
विहाय निस्सारतयाऽन्त्यधाराम्।
निषेव्यते शीतलमध्यधारा
वज्रोलिसिद्धैरमरोलिसिद्धयै" ॥ इति[8] ॥

This verse as quoted by our commentator is identical with verse 96 of the तृतीयोपदेश of the *Haṭhayogapradīpikā*[9] and reads as follows :—

"पित्तोल्बणत्वात्प्रथमाम्बुधारां
विहाय निःसारतयाऽन्यधारा।
निषेव्यते शीतलमध्यधारा
कापालिके खण्डमतेऽमरोली ॥ ९६ ॥"

The first three lines of the above verse contain slight variations in readings but the fourth line is quite different from the fourth line of the verse quoted by our commentator. It is likely that our commentator might have had a different text of this verse before him or he had quoted from memory. In spite of these variants the identity of the two verses in point of major particulars and purport cannot be rejected and proves in our opinion that the हठयोगतन्त्र mentioned by our commentator is no other than the हठयोगप्रदीपिका of Svātmārāma.

The use of the words हठतन्त्र and हठयोगतन्त्र made by our commentator and his introduction of 3 verses which we have identified in the *Haṭhayogapradīpikā* leads us to conclude that Upaniṣadbrahmayogin, the commentator of the yoga Upaniṣads is quoting from the *Haṭhayogapradīpikā*. The date of his commentary on the 108 Upaniṣads is, therefore, posterior to that of the *Haṭhayogapradīpikā*.[10] I have tried to fix the limits of the date of the *Haṭhayogapradīpikā* in an article[11] contributed to the *Indian Historical Quarterly*, (Calcutta), Vol. XVI, (1940), pp. 306-313. These limits are tentatively ABOUT 1250 AND 1550 A.D. and harmonize with the following remarks of Dr. J. N. Farquhar[12] on the *Haṭhayogapradīpikā* :—

"On the *Haṭhayoga* and the *Goraksha-Śataka* which are mentioned above as works attributed to Goraknāth three more modern works depend, the *Haṭhayogapradīpikā*, by Svātmārāma Yogīndra, the disciple of Śrīnāth, the *Gheraṇḍa Saṁhitā* and the *Śiva Saṁhitā*. *The first is*

8. *Yoga Upanishads*, p. 385.
9. *T. P. H. Edition*, p. 140.
10. J. N. Farquhar : *Outlines of Religious History of India*, pp. 348 and 384.
11. *Date of the Haṭhayogapradīpikā of Svātmārāma Muni.*
12. Farquhar : *Outlines* etc., p. 348.
13. *Ibid.*, p. 254.

the earliest of the three". As Dr. Farquhar assigns Goraknāth[13] to "about A.D. 1200" and as the *Haṭhayogapradīpikā*[14] is the earliest of the three works based on the works attributed to Gorakhnāth our limits for the date of this work viz. 1250 and 1550 A.D. appear to be tentatively correct. Consequently the date of Upaniṣadbrahmayogin, who apparently quotes from the *Haṭhayogapradīpikā* as suggested in this paper, will have to be shifted to a period later than 1350 A.D.[15]

P. K. GODE

14. Vide, pp. 9 to 19 of *Hall's Bibliography* of Indian Philosophical Systems, Calcutta, 1859. Halls gives a description of 36 works on Yoga philosophy. On page 16 he gives a list of Yoga teachers as found in *Haṭhayogapradīpikā*.
15. Upaniṣadbrahmayogin in his commentary on the *Vaiṣṇava Upaniṣads* (p. 49 of Adyar Edn. 1923) quotes from a work called कमदीपिका as follows :— ["षडश्रसन्धिषु" इति कमदीपिकोक्तेः] Aufrecht records two works of the title कमदीपिका —one a work on Tantra and another dealing with Kṛṣṇa-worship (See *Cata. Catalogorum* I, p. 132) by Keśavācārya also called Keśava Kashmīri, a well-known scholar and commentator, who is assigned to *early 16th Century* (See pp. 376 and 305 of Farquhar : *Outlines* etc.) If the reference to कमदीपिका by Upaniṣadbrahmayogin proves on identification to be to the work of Keśava Kashmīri (c. 1525 A.D.) the date of Upaniṣadbrahmayogin will be shifted to a period commencing 1550 A.D. or so. As the quotation under reference is introduced in the commentary on the *Vaiṣṇava Upaniṣads* there is greater possibility of its being treated in Keśavā's work on Kṛṣṇa-worship than in a tantric work. For want of definite identification of the reference in question we are unable to deduce any positive conclusion in the matter at present.

SELF-CONFIDENCE

The agile acrobat performs the giant swing
With hands well fixed upon the polished bar—
Feet from the circle's center stretched out far.
His confidence is fixed upon the grip, an inward thing.
We all are actors on this trapeze of life
Our faith within the point wherein we fail or win.
What matter if the crowd give laughs or praises din
If we but clinch our faith midst outer strife.
Peace, contentment,—successes' spurring glow
Is his—*He can Who Thinks He Can!*
First the inward grip and then the outward act
Each must feel the sureness of his central spark.
Hold fast ! Struggle o'er the currents of conflicting wills
SELF-CONFIDENCE—your sunlit universe—will banish ills.

EDWARD L. BLOOM

The Freudian and the Yoga Conceptions of Repression

[Vital differences between modern trends of psychology and yoga psychology have not yet been fully appreciated, for while the former is mainly objective the latter is intensely subjective. Not even the investigation of the "unconscious" by Freud and others has changed their essential differences. On the contrary, over-emphasis to mere objective application and approach has considerably increased the gap between the two, and, at times, their reasoning appears quite incompatible.

Here is an instance of the idea of repression. Admitting that certain physical and mental ailments often have their origin in the unconscious repression, the means employed by both differ widely : the one believing in giving it expression by guidance while the other in gradual annihilation through metaphysical and moral education and thus in regeneration of the unconscious. The *saṃskāra-vāsanā* complex of Yoga has already been explained by us in *Yoga*, III, 19-20.

In this article, reproduced from *Philosophical Quarterly*, XIII, 2, Prof. SHARSHI BHUSAN DAS GUPTA has referred to the difference between the Freudian and Yoga conception of repression.—ED.]

THE dominant idea in Freud which has to a large extent influenced modern psychology, particularly in the departments of neurotic and therapeutic psychology, consists of the belief that we are born with certain unconscious tendencies, which in a way largely determine our experiences. In the course of our experiences also our passionate nature, as determined by the unconscious within us, tries to manifest itself in diverse ways ; but they have to be curbed by us by the means and restrictions of our social environment. These passions, thus repressed, sink back into the sphere of the unconscious and contribute additional strength to the unconscious both pathologically and psychologically. It may be assumed that, he regards the emotions as the dynamic factor of our life ; but it is somewhat surprising that he should give such an undue pathological importance to the sex emotions. But however that may be, the whole principle seems to be, in brief, that repressed emotions (sex) are turned into unconscious tendencies which operate adversely on our nerves and produce, on the one hand, diverse kinds of dreams and diseases and, on the other hand, manifest themselves in the peculiar nature of the interests that we may take in different affairs of life and art. He holds that it is possible to discover the nature of the repressed emotions by an interpretation of the dreams, which are only the manifestations of those emotions in a symbolic manner. By a narration of the dreams as well as the narration of the personal history of the individual, he thinks, it is possible to discover to an individual the nature of the emotions that he unconsciously repressed. He holds further that, by rousing the dormant emotion and bringing it into the conscious field the pernicious influence of the repressed emotions, which were sending forth their arrows from behind the arena, could be destroyed. The significance of the idea is that emotions can exercise their des-

tructive force at their best only when they operate as parts of the unconscious mind. In certain ways it may be regarded that he also believes that the unconscious could be modified to a certain extent ; but according to him, the mode of this modification consists in dissociating certain elements from the unconscious by becoming conscious of them. The hypothesis then seems to be, that whenever any element of the unconscious translates itself into the conscious, its force in the pathological or psychological nature becomes largely destroyed. Incidentally he thinks that repression of emotions by which they are forced to retire from the conscious field before being manifested in it is injurious to our system.

The Hindu view on this subject, however, tends entirely in the opposite direction. Thus Caraka, who flourished in the first century of the Christian era in the Sūtra-sthānam (Ch. 7) gives an enumeration of the different kinds of tendencies which are to be repressed and which are not to be repressed. Without going into the details one may note, that it is advised that the purely psychological tendencies should not be repressed, whereas the mental emotions have been strongly recommended for repression. Thus, while one should not repress the tendency for the calls of nature, one should repress the physical tendencies, if there be any, for doing harm to others and also the tendencies of sex-intercourse, theft, animosity etc.[1]

The entire discipline of self-control, which leads to the formation of character is based upon the conscious exercise of one's own will for the eradication and repression of primitive tendencies. The scientists, the philosopher, the warrior, the politician—each one of these has fought the life's battle hard and has made strong efforts for the repression of primitive tendencies, which could have stood in the way of their success, but none of them are reported to have suffered from the pathological troubles of repression from which Freud's patients sought relief. In the case of these persons there are sources of pleasure and interest which help them in tiding over the pernicious influence of disturbing emotions ; in their cases the disturbing emotions find themselves too weak in comparison with the other dominant interests, or, are consciously and deliberately overcome by an iron will.

Freud's theory is from one point of view very pessimistic ; because, Freud believes that our destiny is guided by an unknown and incomprehensible unconscious over which we have no control. Again, while Freud believes that a part of our conscious or semi-conscious experience can sink down into the unconscious and be torn out from it by suggestions and be made to float in the conscious sphere, he does not think that the same process may be applied to the entire unconscious as a whole. His dynamical, economical, and topographical view of Psychological forces as well as his theory of the censor present a disjointed view of Psychology, which cannot be satisfactorily worked out in accordance with any settled and consistent Psychological scheme. It is true, however, that these Psychological theories are mere assumptions, and even if they are materially changed that would not affect the general position of Psycho-analysis, which is generally concerned with the treatment of the cases of hysteria and other mental disorder. The cure of these cases of morbid patients by certain specific ways of suggestion involving the special relation of the physician and the patient being granted, it is open for a future Psychologist to offer any other Psychological theory for such cures. The cures in themselves do not guarantee the truth of the Psycho-analytic theory and our knowledge of Psychology in other departments of life does not lend any assistance to the acceptance of the validity of the Psycho-analytic theory.

But in the present paper we are not concerned in supporting or refuting the Psycho-analytic theory. The theory of Psycho-analysis assumes the existence of the primitive unconscious, which may be equated with instincts and which are not explicable by the *a posteriori* experience of our lives. In the Yoga-theory of psychology the unconscious may be equated with the complex of " Vāsanā " and " Saṁskāra ". The "Vāsanā-Saṁskāra" complex is also primitive as the Yoga asserts that it is transmitted to us in the beginningless series of previous existence in other births. Even if the theory of re-birth be admitted to be true, " Vāsanā-Saṁskāra " complex is primitive and original so far as this life is concerned. The conscious mental states can be equated with the vṛtti of the Yoga psychology. The Yoga psychology holds that the vṛtti passes into Saṁskāra and is conserved there as a power by which the Saṁskāra Vāsanā complex may at any time project that vṛtti in the same or a distorted form owing to the resistance of other Saṁskāras. According to such a theory, the repetition of such a vṛtti, increases its potential power in the Saṁskāra and increases the chance of its projection as a vṛtti. But it is quite possible that vṛtti, which has not its power strongly presented in the Saṁskāra-complex, may find itself projected in a distorted manner in association with other partially manifested vṛttis, or, under conditions of resistance of other Saṁskāras. Here then, we may have a theory, which may be regarded as a plausible alternative to the psycho-analytic theory, for, if by suggestion the potency of the vṛtti can be increased and its mute struggle in the Saṁskāra be thereby annulled, the course of the destructive vṛttis, or, the conflict in the Saṁskāra may also be annulled, and we may have such cures as are claimed by the psycho-analysts.

But we are not interested here in elaborating an alternative theory of the cures of morbid patients ; but we wish to affirm that the unconscious and the conscious form a homogeneous whole such that the conscious

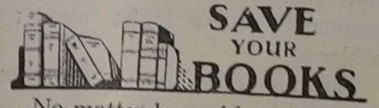
1. Dehapravṛttiryā kācidvidyate parapīdayā |
strībhogasteya-hiṁsādyā tasyā vegaṁ vidhārayet ||
Sūtrasthānām, ch. 7, verse 29.

strengthens and develops the unconscious and the latter insures the recurrence and the strength of the former. Such an assumption changes the nature of the so-called un-alterable un-conscious. For, though the un-conscious may be original and primitive with us and in some sense beyond our control, yet it is not entirely so; for, by determining the sphere of the conscious we may determine to any extent the nature of the un-conscious, which is itself a prolongation or extension of the conscious and at once homogeneous with it. If by any means the sphere of the conscious can be modified by inducing a particular kind of strain through vigorous and continued mental effort, or if certain special kind of interest may be generated by habit with reference to certain types of mental states, then the nature of the unconscious will be so modified that these elements of the unconscious which would have arrested those special kinds of mental states will themselves be annihilated and the unconscious instead of playing the part of a foe will play the part of a friend. This explains the well-known cases of mental re-generation due to good association, instruction and the exercise of a healthy moral will and also the reverse cases of moral degeneration under opposite circumstances.

One important fact that needs be emphasised in this connection is the part that is played by interest or agreeable emotions in determining an effective control of the unconscious by the conscious. The Vāsanā Saṁskāra complex in itself contains elements which are translatable in the form of emotion in the conscious sphere. It is the forces of these that gives a solidarity to the Vāsanā-Saṁskāra complex. All passions, which are associated with instincts are remarkable for supplying those elements which are designated as emotion in the conscious state. The unconscious may thus be regarded as the repository of potential passions. These again according to our formula are replenished by passions and their associated emotions in the conscious state. In order that the unconscious may be affected for the purpose of moral regeneration, it is necessary that the experiencing of passions in the conscious sphere should be dominated as far as possible; but the experiencing of passions cannot be eliminated, for being of the nature of emotions, they are the real dynamic causes which rouse the unconscious to project itself into the conscious for the flashing in of mental states. It is, therefore, necessary that instead of stifling emotions (which is a very doubtful mental endeavour) one should try to habituate oneself to indulge in such emotions as are opposed to these passions or emotions which are intended to be suppressed or repressed. The moral problem thus is very closely related and associated with the psychological problem. The psycho-analyst being interested only in the case of psychological cures of morbid cases, naturally neglects the moral side of the question and is led to a very partial view of the psychological situation.

The Yoga-psychology holds that it is possible to arrest the mind on a particular conscious state, such that the constantly fluctuating tendencies of the mind in relational lines may be arrested. It further holds that such a steady arrest of the mind in a particular mental state produces a new type of knowledge (prajñā) which has a subversive effect on the Saṁskāra-Vāsanā complex. These prajñās appear in the conscious plane but are heterogeneous to the Saṁskāra-Vāsanā complex and, therefore, cannot be absorbed by it, but is, on the other hand, attenuated or gradually annihilated by it. We have thus a concept of repression which is applicable not only to the conscious mental state, but also to their original sources, the unconscious. While partial repression of conscious mental states may be unhealthy under certain circumstances, the trained and organised repression of the conscious and the unconscious may lead to a happy regeneration of the conscious and the unconscious in a new plane of elevated existence. Our conclusion, therefore, is that the psycho-analytic theory is a very partial statement and cannot explain the true significance of repression in the application of practical psychology for the regeneration of our mind and morals.

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Why Vegetarianism Sometimes Fails

[It is becoming increasingly evident to modern dietitians that the value of food transcends the mere nutritive values in the physiological sense but also has its counterpart in the psychological potency. Inversely, certain psychological and physiological peculiarities create appetite for like foods from which such elements could be nourished. This inter-dependence of food values in relation to both the body and mind and *vice versa* was fully realised by the yogins thousands of years ago. In presenting yoga dietetics, the ancient authorities have weighed these influences with utmost precision. In this article, MRS. LILLIAN R. CARQUE of The Carque Natural Foods Research Institute of California (U. S. A.), a well-known American dietitian, has outlined the same underlying principles. For students of Yoga, the creation of harmony through right selection and purity of food cannot be over-estimated.—ED.]

ALL humanitarians agree that with the establishment of a saner social order, we would destroy many seemingly permanent sources of misery and hindrances to happiness. True—the organization of society is such that it awakens all evil tendencies. A favourable environment will develop, however little, the weak social instincts of man. But we must not attribute our present world unrest to sociological causes only. These, of course, do influence the scheme of things. Yet man's struggle with his environment is a negative rather than a positive issue. The defeats or triumphs of his social institutions are really the redemption and vindication of his own thoughts and motives. Is it therefore not reasonable to assume that one of the cures for world disease is to be found in living more in sympathetic relation to the laws of Nature, for are they not the laws which govern our being?

Thus we obviate the need for the restoration of any violated equilibrium physically, mentally and morally in the universe. Harmony can only be restored when we permit the divine spark within us to shine forth steadfastly in changeless glory, for by opening our hearts and minds to nobler virtues, we co-ordinate the forces for good, and thus permit natural law to operate harmoniously. A purity and sobriety of heart and mind, fortified by a nobility of character must inevitably accrue to ourselves as virtues, when we learn to direct our base animal appetites and passions subservient to the commands of our higher mind and nobler soul.

Gluttony does not control our minds without our consent. In every instance the individual holds a position where he deliberately chooses to be controlled. The character of food selected reflects consciously and unconsciously the individual's own character and motives. The evolution of the mind must inevitably be in advance of dietetic progress.

The mental and psychic impulses arising from sluggish, indifferent or even corrupt and brutal minds, impelling morally purposeless deeds and perverted gratifications correspondingly crave degenerate foodstuffs poisoned with unspeakable putrifications. Some wayward races are reputed as eating grasshoppers and

even poisonous snakes; others crave flesh foods and cheese when they are pungent with rot. Obviously their hearts and minds are of a character that seek affiliation with the lower elements of Nature—the destructive and disintegrating entities.

The quick ambitious mind is driven by desires of personal possessions, aggrandizement and achievements, where each object acquired becomes cumulative and never satiated. The unduly accelerated physiological activity stimulated by desires for more and more excites with corresponding avarice every cell-life comprising the human edifice. Since spices and condiments stimulate the appetite for food far in excess of physiological needs, bitter, too acid, excessively hot and salty foods are actually craved by the cells of a body quickened by unsatiated overbearing mental and psychic impulses.

Conversely where there is a burning zealousness within ourselves to be efficient intelligent vehicles for human service, the foods selected are of a purity that will maintain the temple of the soul at the highest point of efficiency for work and constructive endeavour, to thus intensify our capacity to serve.

The nutritive elements harmonious to human cells exalted by a pure mind and noble soul instinctively seek and thrive best on such foods as contain their nutritive elements in a purer, more refined or vitalized condition. Hence the nutritive elements intended for the human cells, subjecting themselves to the will of infinite divine wisdom directing the temple of the soul, must range much higher in the scale of vibratory activity than the katabolic processes or descensive vibratory forces resident in disintegrating foods.

In response to the emergence of more refined impulses towards a higher more sympathetic life, there ensues a dietary response in the more hardy vegetables, tubers and legumes. The refreshingly invigorating green-leafy vegetables and tasty nuts subsequently make their appearance in the rational dietary, followed by their fitting companion—nature's alluringly palatable luscious fruits.

Yet dietetic purity is sought and craved only in direct ratio to moral purity. A persistent demand for a pure, wholesome diet will arise within ourselves only proportionate to a mind whose own purity demands a corresponding purity of foods. The gamut of physiological processes, namely the impress given to the food subsequently to become an intrinsic part of replenished bodily cells, are progressive or retrogressive, constructive or destructive, according to the purity, intelligence and power residing in our Thoughts and Motives. For only the pure mind can give a sound and progressive direction to the digestion and assimilation of pure foods, while an impure, fitful, purposeless or selfish mind interferes with the higher rhythmic rates of vibrations of wholesome sustenance, inhibiting harmonious metabolic processes.

The foods we eat are vehicles of power, charged with every elemental energy and potency of the solar

system, but it depends upon the constitution of the eater, on his power to unlock the vital storage batteries of the foods, and to elicit their creative and sustaining forces. Without being energized by a morally enlightened will, the mind is powerless in bringing out the finer forces of natural foods—forces that express in organized vitality the moral dynamics of a spiritual universe. An impure mind with its demoralized willpower is capable of effecting the same diseased fluids in the digestive secretions as would result in the consumption of diseased food itself.

The criminal mind, vibrating in the key-note of criminality, the incensed mind gravitating to a lurid vortex of destructive passions, fearful, envious, lustful, corrupt and degenerate minds impress the nutriment consumed with their own specific destructiveness and rank vibratory energies, reducing to ruin and ashes precious nutriments—once pillars of vital strength.

Hence the inadequacy of the human organism of an eccentric, passionate and ungovernable subject to adjust itself to the rapid heat evolution of fruit sugar, for example, would render the use of such fuel for bodily energy not only impractical, but dangerous. While a diet of fruit, which in a refined self-composed and idealistic nature would insure most beneficial digestive and assimilative action, it would give rise to extreme physiological disturbances if consumed by a gross animal-disposed and animal-fed nature. A more tardy means of combustion is needed as are inherent in stimulating foods, or more powerful in ignition as are unfortunately available in the temporarily explosive action of alcoholic beverages to replenish the tremendous leakages of vital force dissipated through assorted forms of mental, moral, emotional and physical misconduct.

It is idle to deny that natural foods have remedial powers, for our Great Sustaining Source has fortified them with therapeutic properties to help Nature's erring children in their stumbles on their onward and upward evolutionary flight. Hence a natural diet may be prevented from yielding to the coercion of a selfish and immoral motive, apparently resulting in momentary benefits to one seeking health merely for the perpetuation of some carnal pleasures. But the processes are artificial and will not give permanent results, for intemperance and frivolity pervert the noble attributes of our souls; and must, in the course of the inevitable, rebound due to a violated equilibrium and devitalize the usurped vital vibratory energies. Evil condemns every atom of the human edifice.

The power of a corrected diet to modify the character of the physiological processes lies principally in its influence on the individual's moral nature, by way of the sacrifices involved in the dietary restrictions. Hence any attempt to fundamentally effect any radical changes in a person's diet without previous knowledge of his moral needs and shortcomings is mere guess work or a play with chances. Moral regeneration side by side with physical development alone can ultimately evolve digestive and assimilative powers harmonious to a purer hygienic diet.

But you may ask, "Is not man's vital relationship forever fixed?" Most assuredly natural foods are the natural diet of man. The fact that the majority of our flower-bearing plants and fruit trees are unknown in a fossil state clearly demonstrates their recent origin, which must have been simultaneous with that of man. Back of a rational dietary, however, must ever be found moral discipline, accompanied by a resolute desire to render ourselves more fit and valuable in the service of humanity, promoting our usefulness and enhancing our capacity to serve. Such ethical progress and purifications will render a finer evolving and regenerated human body more harmonious to man's natural diet and nature's immutable laws. Aroused by the awakening of a higher consciousness, man will moreover content himself with dietetic frugality—with the strengthening and beautifying discipline of self-control and refined dietetic reserve. Sumptuous dinners, complex and artificial foods and beverages are a sign of decadence. True progress is of the soul, and hence it is most incompatible with the perversions and hoggishness of unmoral and luxurious living for the mere gratification of sensuous indulgences or distorted egotistical motives.

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Yoni Mudrā

THE essential preliminaries of training best suited to a layman in his study of Yoga have already been discussed in the previous issues. The need of physical well-being through postural training which collectively fulfills the requisites of physical exercise and of the acquisition of a steady pose for prolonged meditation has also been stressed. The twenty-one meditative postures so far elaborated offer a very wide range for selection and may serve as a non-violent and non-fatiguing type of physical education for those who do not desire to practise complicated postural training enjoined by Haṭha-yoga.

As an accessory to this study of extrinsic (*bahiraṅga*) Yoga, the graded technique of various breathings was introduced and the reader is now expected to be fairly well acquainted with yoga breathing—essentially safe for the lay students. Among the auxiliary processes introduced by us for self-study (safe for study needing no personal guidance) are the Uḍḍīyāna and Mūla bandhas, Trāṭaka, Viparītakaraṇī and Aśvinī mudrās.

Since no yoga attempt could be successful without a *moral life*, the practical complications of Yama and Niyama have been discussed with a view to disciplinary training. Again, how difficulties of emotional, moral and mental life could be adjusted by recourse to contemplation of the opposites has also been clearly shown.

Through lessons in physical concentration, relaxation, pictures on the mind, and study in mental movements, we have introduced even the training in *pratyāhāra* or abstraction for the control of the senses. But with all these, however, if the student should find himself at a loss to grasp the right attitude for further effort towards intrinsic (*antaraṅga*) Yoga, he can take aid of Yoni mudrā especially recommended to overcome such an obstacle in controlling the external senses.

The Yoni mudrā of *Gheraṇḍa-saṃhitā* is spoken of differently by various authorities but connote the same attempt at control of the external senses as is evident from the significant terminology used by them. Thus, *Haṭhayogapradīpikā* describes it as Parāṅgamukhī mudrā i.e. the process of turning away from (*parāṅgamukhī*) the objects of the senses. The *Yogasopāna* refers to it as Ṣaṇmukhī mudrā because this practice through the closure of six main orifices (*ṣaṇmukhī*) helps the students to avoid contact with sense objects. It is rightly termed Yoni mudrā because, with its aid, the yoga aspirant can reach through subjective approaches, after having avoided objective contacts, his true origin or *yoni*. The word *yoni* (which also means "womb") usually signifies, according to the yoga terminology, the Ultimate Brahman or *brahma-*

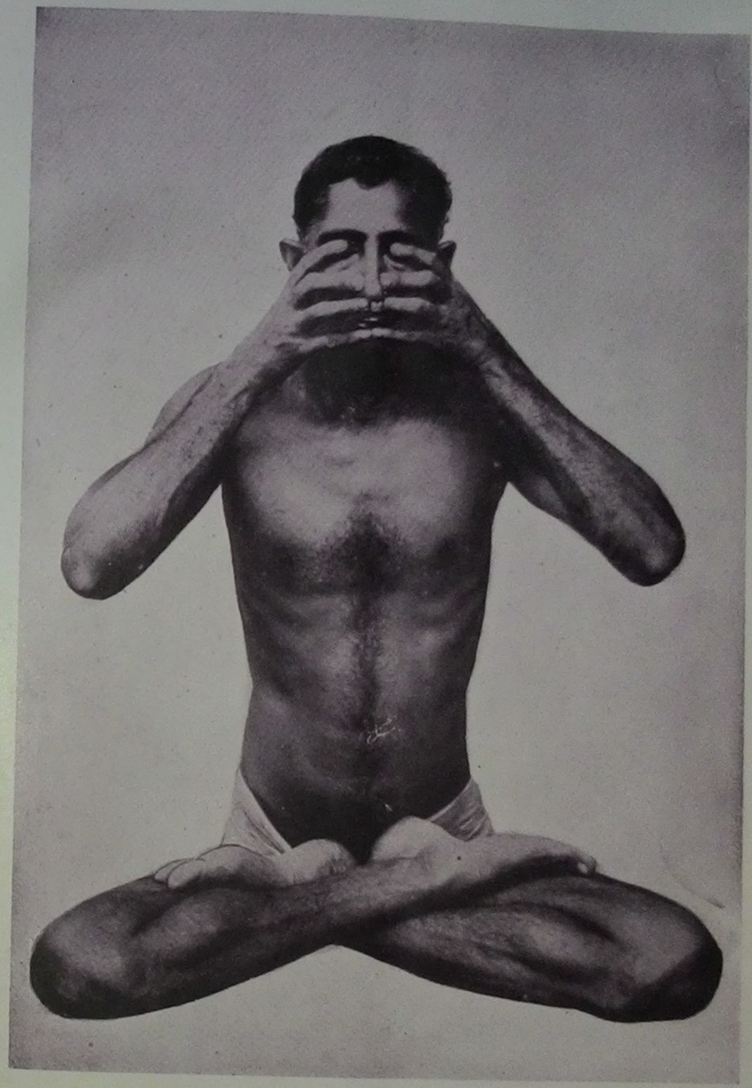


Fig. 39.

Yoni mudrā in Ardha-padmāsana. Note the skilful arrangement of fingers to close the ears, eyes, nostrils and the lips.

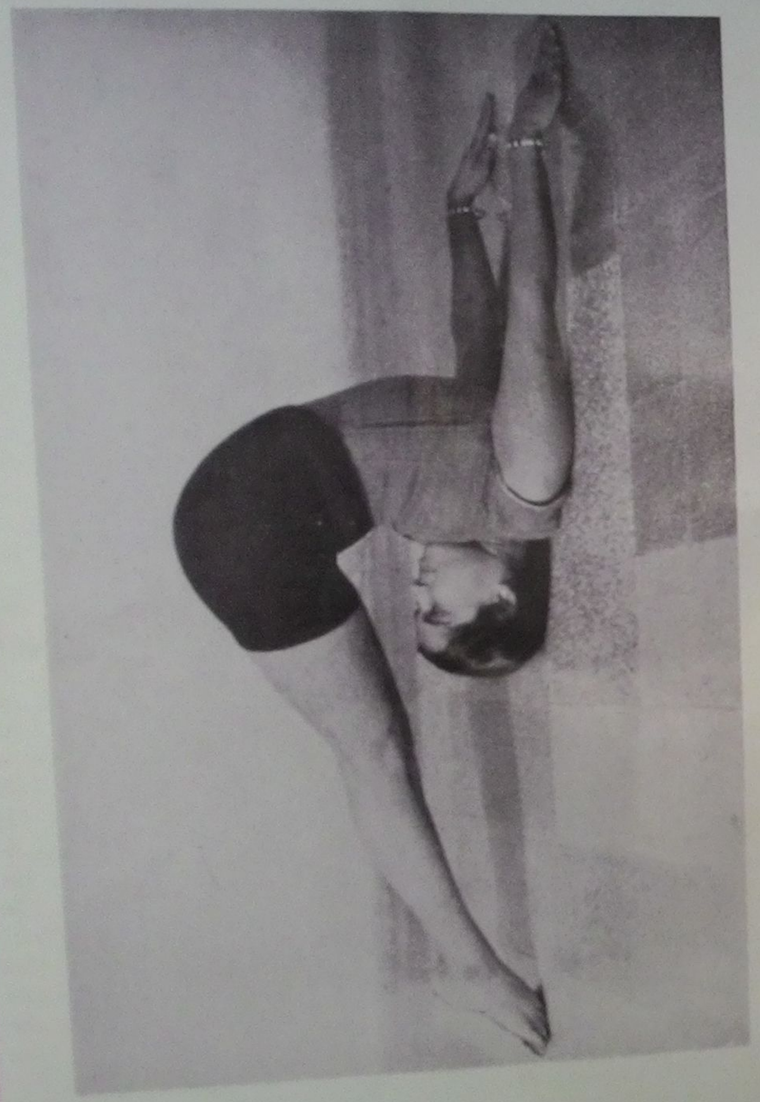


Fig. 40.
Halāsana with the hands extended and the toes pointing outwards beyond the head.

yoni, and this process which is supposed to finally lead to the Brahman is known as Yoni mudrā. This mudrā further provides the best psycho-physical method for inducing and developing abstraction under unfavourable or disturbing surroundings, and is, therefore, extremely useful to a layman in his study of higher Yoga.

It is practised as follows :—

First of all, secure Siddhāsana or Ardha-padmāsana as previously. Now keeping the hands on their respective sides, close the two ears with the two thumbs, i.e. the right thumb closing the right ear and the left one closing the left ear. And, so on accordingly, close the two eyes with their respective index fingers, the nostrils with the middle fingers, the upper lip with the fore fingers and the lower lip with the small fingers. See Fig. 39.

Breathing is permitted in a slow measure either through the nose as in Alternate breathing or Sūrya-bhedana prāṇāyāma (Cf. *Yoga* Vol. III, pp. 73 f.) or through the mouth by drawing the lips together permitting a narrow passage as in whistling. During retention, the nose or the mouth, as the case may be, should be kept closed with the respective fingers.

Freed from the distractions of external senses, let the student poise within himself and simulate the state of abstraction wherein nothing is heard, nothing is seen, nothing is felt and nothing distracts the mind. When this is achieved after a few minutes, synchronize the rhythm of breathing to the sound of mental repetition of the words *Haṃ* (during inspiration and retention) and *Sa* (during expiration). If no mental distractions break the continuity of this effort, the student may progress further harmonizing the efferent and afferent nerve-impulses (*prāṇāpāna vāyus*) and gradually making them pass through the channel of the *suṣumṇā* or the spinal cord. The mudrā is considered successful when finally one is able to fix his mind on the thousand-petalled lotus or *sahasradala* (in the brain) and remain fixed there in prolonged contemplation.

With a view to enthuse the initiated in the practice of this *mudrā*, *Śivasaṃhitā* and other authorities have been very eloquent in its praise promising attainments which are likely to be misunderstood if not analyzed in their proper perspectives. What really does happen is that during the state of non-attachment and non-pain temporarily induced through Yoni mudrā one enjoys the bliss of peaceful solitude even in his wordly life. If circumstances permit, one can devote most of his leisure to this practice which is sure to establish him in the pursuit of higher Yoga.

Women's Health and Yoga

[Here is an extract from SM. SITA DEVI'S new book *Yoga for Woman*, now in press. She is a registered medical practitioner in charge of the ladies' section of The Yoga Institute for over ten years. Her knowledge of Yoga in relation to woman is as intimate as it is wide. Her appeal to social workers of the fair sex to maintain exuberant health both for efficiency and personal charm for the successful execution of their duties deserves attention.

We have already emphasized that yoga exercises can be followed with benefit by both sexes—except that certain āsanas and their dynamic variations are more suited to their special needs than others. Halāsana or the plough-pose recommended by her combines in one the beneficial effects of semi-reverse, intra-abdominal compression, pelvic drainage and the full value of spinal stretching. Practised according to instructions, it cannot possibly do any harm to those who have already followed her previous lessons in *Yoga* or from her book *Postures for Woman*.—ED.]

FOR maintaining the day-to-day health of women, there is more in Yoga than meets the eye. Scientific Yoga has a cultural section for physical discipline involving hygiene, preventive measures and therapeutics. Women's health, as women themselves, has been neglected so long that if we continue to neglect it still further the consequences to the individual and the nation are bound to show themselves very badly sooner than later. I make this statement because there seems to be a general growing impression among the leisured section of womenfolk in cities and elsewhere that their first duty should be to the less fortunate members of the society. But what example of physical well-being are these leaders to take to the suffering when they themselves suffer from poor health?

I make therefore an earnest plea that those who intend taking up and are actually engaged in humanitarian work build up a sound system themselves. This will not merely serve as an example to others, but also lighten the burden so far as the work itself is concerned. To take good cheer to hearts with no cheer requires an abundance of it in those who determine to carry it. Now, good cheer means self-confidence and a reserve of vitality, and vitality comes only from good health both physical and mental. Strength of character is also a source of vitality—strength of even a moderate degree requires moral and spiritual stamina. Lack of such strength means lack of purpose, lack of essentials for success, and hence the need to build up strength.

The right thing to begin with is the body. Besides yogic postural training, food deserves equal attention. Food—the right type of food—is a source of vitality which no-

woman should overlook in her craze to look slim and sylphlike. It too often occurs that more women than is ordinarily believed deny themselves enough food in the false hope that this will lead to the reduction in the size of their figure. This assumption is so prevalent that girls even from their earliest teens begin to discard solid and sustaining food and take to liquid diet. The consequence is that the pelvic development, the mainstay of woman's health and strength, is arrested. And though the girls may grow normally in other respects, the size and strength of the pelvic organs remain like that of an immature girl.

Apart from the loss of proportion which an ill-developed figure fosters, there is also the added risk to health due to impaired function of the ovaries. Moreover, it is a scientifically established fact that it is on the proper working of the ovaries that not merely the health but also the charm of women as women depend. The sane course of action would therefore be to eat the right type of foods in the right quantities and rely upon the influence of rational exercising to keep in check any tendency of the figure to outgrow the limits of fashion. Here it is that the yogic physical education comes to the help of the fair sex in an admirable way. The initial postural training requires no accessories, not much of personal guidance, less of muscular exertion and the least of violence through frequent repetition. The physiological benefits of such training and postures have been fully investigated at the Institute with the aid of scientific research data during laboratory work.

Constitutionally, women are a little more subject to the curse of constipation than men because of structural differences. But this can be easily overcome by adopting certain dynamic postures which take good care of the mid-trunk. Add to these movements a few static postures like Halāsana or the plough-pose which influence the pelvic region, spine and the posterior muscles by alternate activity and rest, and you ensure perfect health.

Halāsana is practised as follows: First, lie supine on the floor with hands resting on sides, palms downwards. Now raise both the legs together, *slowly taking in the breath*, and bring them to a right angle with the body. With *slow exhalation*, raise the hips and lower the legs towards the head. Keep the legs together and stretched-straight. Efforts should be made to gradually bend the spine as the legs near the floor beyond the head. Point the toes outwards and slid them farther away from the head with relaxing movements of the lower and upper dorsal regions. Normal breathing may be assumed now, but remember that it is better to breathe *very slowly both during inspiration and expiration*. Retention of breath is not indicated. The final stages vary according to the nature of spinal elasticity allowing maximum possible curve either with the hands in their original position, as in Fig. 40,

or placed behind the head with a finger-lock.

Those with stiff muscles, inelastic or deformed spine or over-weight should begin with caution and need not feel disappointed if in the beginning, the toes do not touch the floor. By daily gradual practice, however, this posture will become easier each day. During pregnancy and the first three days of menses, the practice of Halāsana is contra-indicated. Its special benefit lies in the healthful effects on the nervous and digestive systems and the genital organs. The inverted intra-abdominal pressure contributes largely to the proper functioning of the pelvic organs and strengthens the supporting muscles and ligaments of the uterus and the ovaries. As a preventive measure, Halāsana is extremely effective in eliminating toxemia. Freed from continuous or repeated toxic accumulation, the body becomes healthy and the mind clear. Hysteria and neurasthenia, the nightmare of many a worried woman, could hardly find a lodging place in a body regularly stimulated by effective yogic exercises suited to women. As a therapeutic measure, this pose is indicated in the treatment of constipation, chronic appendicitis, enteroptosis, obesity, sexual debility, menstrual disorders and spinal rigidity.

Those suffering from prolapse of the uterus or hernia (especially navel) may try this posture cautiously only in its dynamic secondary form, i.e., with folded legs to reduce the tension to the minimum. Start with only one movement a day—the total time taken being not more than 15 seconds during the whole process. Then add a few seconds of pause at its final stage as in Fig. 40, each alternate day, till the maximum pause of one minute is reached. It is best tried in the evening when the body is more supple than in the morning; but, after it is perfected, it should always be practised in the morning, on an empty stomach.

SITA DEVI

(*Continued from page 173*)

XXI of 1860. The permanent constitution provided for in the Memorandum of Association, Rules and Regulations is available to the public in a printed form (*price* Re. 1|-). The Annual Report for the Twenty-Second year, showing the progress made in various departments, during that year, can also be had from the Institute (*price* As. 4). The Twenty-third Year Annual Report ending September 30, 1941, appears on pages 174-182. Let posterity judge the wisdom of this Trust and, through its progress, the worth of those interested in Scientific Yoga Renaissance.

Query Corner

Śirāsana: How Long Should it be Practised?

31. Mr. M. L. Dy. Collector, writing from Basti, U.P. seeks information on Śirāsana as follows:

"1. Whether Sheer Asan should be done in the morning or evening?

"2. Whether one should exhale or inhale while doing Sheer Asan?

"3. Whether the eyes should be closed while doing Sheer Asan?

"4. Whether Sheer Asan should be taken before or after other yogic and physical exercises?

"5. For how long a worldly man should take Sheer Asan?"

Śirāsana is also referred to by some as Śirshāsana. Firstly, while Śirshāsana can be practised either in the morning or in the evening, it is better for those engaged in mental pursuits to follow the same in the morning on an empty stomach and in the evening—at least 30 minutes before food—by those engaged in physical activities than otherwise. Secondly, breathing during Śirāsana should remain normal, slow, rhythmic and continuous. This varies when it is practised in combination with other yoga accessories. Thirdly, it is advisable and beneficial to close the eyes during Śirāsana than to keep them open. Fourthly, Śirāsana should be practised after yoga postures or physical exercises generally and should be followed immediately by any one of the relaxing postures.

Lastly, regarding minimum and maximum period indicated in the practice of Śirāsana by a layman, we are aware that there prevails a great deal of confusion, exaggerated expectations and unscientific outlook not only among many students of Yoga but also among the so-called teachers of Yoga themselves. We have also been informed that some writers like Kuvalayānada (J. G. Guṇe) and others have gone to the extent of fixing the minimum period at twelve minutes and the maximum at twenty-four minutes even suggesting that a few individuals have benefited by practising it for nearly one-half an hour. In the light of our clinical and scientific experience extending to nearly a quarter of a century, we consider these suggestions highly unscientific, unwise and dangerous for the average lay student of Yoga. Recommendations based upon short experience and limited observations on trained healthy students are no guidance for fixing standards for the busy laymen whose health on the average is usually below normal. Furthermore, yoga physical education is not gymnastics or acrobatism and the display of such long periods has no scientific approval. The physiological benefits of Śirāsana begin to manifest after the first twenty-five seconds and continue for another period of nearly four minutes after which its reactions on the internal organs indicate strain. The increased arterial tension, if habitually continued for long periods, is found to damage circulatory and pulmonary vessels and even affect the organs within the cranium. And while the evil effects do not become apparent immediately, we have come across cases where misadventure in respect of Śirāsana through information picked up from popular but unscientific writers has endangered the lives of unwary laymen. In our opinion, the maximum period for the practice of Śirāsana by a layman is five minutes.

News & Notes

During the Interregnum

The last issue of *Yoga* was published in August 1938 as an historical perspective dealing with the modern scientific Yoga movement pioneered by this Institute. Lack of funds and facilities made it impossible for the Institute to publish this last issue of Vol. IV earlier than now.

In our previous issues, we reviewed the affairs of the Institute upto May 1936 and also announced the change of headquarters from Bulsar to Bombay. Many things have happened during these six years and while it is not possible to survey *all* that has happened, we propose to give below a résumé of our various international activities which vitally concern the progress of scientific Yoga and of this Institute.

Grinding Duties for Two

Not many out of those who expect or demand prompt attention in execution of the duties and affairs of the Institute seem to be aware that the entire burden still rests exclusively on two persons—the Founder and the Secretary. It is therefore physically impossible to accommodate all demands and expectations which the students of Yoga may legitimately hold regarding our present and proposed activities. Why do we not provide for such facilities as are expected of an Institute of our magnitude? Why do we not increase the staff or accept honorary workers? Firstly, because we have no economic provision for additional responsibilities; and secondly, because we prefer not to accept any worker on the staff unless he or she fulfills all the requisites of a genuine student of Yoga. Compromises in cultural affairs have created enough of confusion in public mind with regard to yoga fundamentals, ideals and their practical values in daily life; and we would rather carry on as at present than to parade false devotees by accepting as workers those who really do not belong to the category of yoga aspirants.

Unbroken Routine

During each year, the normal routine at the Institute comprises (*i*) about 2000 enquirers seeking information in person about Yoga and the Institute, (*ii*) at least 1500 enquiries by correspondence, (*iii*) nearly 100 visitors of scientific or academic repute, (*iv*) more than 3200 outgoing postal articles and packets, and (*v*) an average attendance of 2750 students and patients for 260 working days, besides multifarious academic and scientific research, cultural, editorial and publishing activities. All these have to be managed between two people just because those who profess to sympathize with and have actually benefited by our activities have failed to do their part of the duty. The State can hardly understand what we are doing and the rich philanthropists will not condescend to assist us unless we flatter them. This paradox therefore will continue till such time that something overtakes the public to change their incorrigible outlook towards matters scientific and cultural pursued purely for humane purposes.

Founder's Lectures at the B. O. R. Institute

The Regulating Council of the Bhandarkar Oriental Research Institute of Poona invited the Founder to deliver a series of two lectures on the occasion of the celebration of their Foundation Day on the 6th and 7th July 1936. The lectures dealt with "Yoga for the Householders" and "Yoga as the World Culture" respectively. The Press published the following report of the lectures :—

"Contrary to the popular belief that Yoga is unsuited to the life of a householder, Shri Yogendra of the Yoga Institute, Bombay, during the course of his lectures on the Foundation Day of the Bhandarkar Oriental Research Institute at Poona, emphasized the fact that not only is applied Yoga compatible with the duties of a householder but that it is he, more than anyone else, who stands in constant need of its practice to sustain good health of body, mind and soul amidst a whirlpool of complexes to which he is daily subjected.

"Yoga as a science is applicable to one and all and admits of no distinction whatsoever either of caste, creed, nationality, sex or religion. It serves as a real stimulus in all life activities for is it not Yoga that supplies inspiration to the artist and the poet, concentration to the scientist and intuition to the philosopher? Without Yoga, no real art could thrive and no monumental work could be completed successfully. For it is during the highest stage of Yoga that the best in man is revealed.

"Modern sciences merely go to confirm the ancient claims of the Aryans that Yoga Culture is the most comprehensive applied metaphysics thoroughly suited to all types of humanity. The most redeeming feature of this unique culture is its guarantee of ultimate success under all circumstances. Free from prejudice and limitations, the science of Yoga, with its universal appeal and rational programme for the health of body, mind and soul, will be hailed as the world culture. Unlike other cultures, Yoga adheres to a practical path of salvation through scientific methods and is thus capable of demonstrating uniformly guaranteed results.

"At this stage of civilization, this keen struggle for existence and superiority, this age of divided interests and suicidal schemes of misguided humanity, let us fervently hope that the message, the catholic spirit and self-culture taught by Yoga for physical, mental and spiritual perfection may reach those who for the time being control the destinies of nations and awaken those who have eyes to see, ears to hear and hearts to feel. If superhumanity is the aim of civilization, let Yoga demonstrate the possibility and means of its achievement."

He also emphasized the need of mass cultural movement under the joint auspices of various distinguished philosophical institutions with a view to awaken culture-consciousness among the public as the only solid protection against the satanic forces of destruction. In response, Dr. V. S. Sukthankar of the B. O. R. Institute requested the Founder to prepare a memorandum on Mass Cultural Movement for consideration of the Council. Unfortunately, the grinding duties at the Institute could not permit the Founder sufficient time to prepare a well-considered memorandum and the matter is still pending for the same reason.

During 1937

On January 4, Drs. Theos C. and Viola Bernard, prominent physicians of New York, who have been conducting scientific researches on Yoga practices for the past two years, visited the Institute immediately on their arrival in Bombay and were in conference with the Founder for nearly four hours.

On March 17, the Institute announced a series of free lectures on Yoga with a view to make the public

yoga-conscious. The inaugural address was delivered by Shri Yogendra on the "Message of Yoga" at the hall of the Institute. The following report appeared in the local Press :—

"Speaking before a crowded gathering at the Yoga Institute, Shri Yogendra deplored the fact that at present there is more frivolity than seriousness in our concepts of life and living, and this is the root cause of all our modern troubles. He attributed the prevailing wrong notions about Yoga Culture mainly to its supposed adherents who carry a beggar's bowl in one hand, spiritual pretences in the other, dagger in their heart and flattery to their benefactors on their tongue.

"True Yoga is an art, the art of living healthy—physically, mentally, morally and spiritually. The message of Yoga consists not in renunciation of the non-action type but in due performance of our daily duties with dexterity and discrimination. The value of practical Yoga lies in imparting the essential training for such an ideal. What is urgently required is the establishment of reliable Yoga centres where training in the art of living is given by those who actually live it."

On the 4th April, another public lecture on "What is Yoga" was delivered by the Founder. A summary of the Press report appearing throughout India is available to the readers in the last issue on pages 47-50.

On April 5, His Holiness the Śaṅkarācārya Dr. Kurtakoti paid a visit to the Institute and expressed great admiration for the pioneering efforts and activities conducted by the Institute towards scientific Yoga renaissance. On May 2, Prof. N. K. Bhagwat, Fellow of the University of Bombay, delivered a lecture on "Buddhist Yoga on Mental Culture" under the auspices of the Institute.

On the 23rd and 24th June, Mr. Paul Brunton of London, a journalist on Yoga, came to the Institute for seeking information about Kuṇḍalinī and matters relating to Yoga. At the conclusion of the discussions, he admitted that he is "merely a dabbler" and that his main profession is journalism. Thereupon he was asked by the Founder to refrain from writing on Yoga—a subject about which he knows too little in absence of traditional knowledge contained in ancient texts and also because of lack of contact and long practice under a distinguished teacher of Yoga.

During his visit on the 8th October, Dr. V. S. Sukthankar referred to the "Yoga Institute—one of the most interesting and vital places in Bombay city." This impression has been expressed over and over again by those scholars and lovers of culture, both Indian and foreign, who visited the Institute.

On October 24, the Founder delivered a lecture on "Yoga, As an Art of Living" in the Besant Hall at Allahabad. Among the large and selected audience were Readers, Fellows and Professors of the Allahabad University including the Vice-Chancellor.

"Wondering whether you would favour us with one more of your learned lectures, again, at the Institute. Your last course was indeed instructive, and it is but natural that we wish for more of it, now." With these words the B. O. R. Institute prevailed upon the Founder to deliver another lecture on "Physiological Yoga" at the J. N. Tata Hall on the 28th November.

On December 6, Mr. Peter Freeman, an ex-Member of the Parliament, visited the Institute. According to the *United Press* report, "He discussed with Shri Yogendra many aspects of the Yoga Culture. It appears that he came to see miracles but was greatly surprised to learn that Yoga is an exact science."

During 1938

On January 2, Mr. N. S. Subba Rao, the Vice-Chancellor of the Mysore University paid a visit to the Institute and highly appreciated the scientific and academic research work carried on by the Founder. He expressed desire that the Founder should deliver a series of lectures under the auspices of the Mysore University.

During March, April and May 1938, many foreign students of Yoga approached the Institute for training. They hailed from America, Switzerland, Italy, France and Poland.

Yoga at Health Welfare Congress

On June 27, with our permission, the *United Press* announced :

"The 'United Press' understands that the Women's Health Federation of America, which is to hold the Health Welfare Congress during the period of New York World Fair in 1939, have appointed and invited Sm. Sita Devi as an Official Delegate to the Congress."

It shows how far the Institute succeeded in promoting the cause of scientific Yoga in the West even in health matters—a field in which the West has hitherto played the role of being a teacher.

But This India !

After being thrown from pillars to post for nearly 20 years, it was finally decided to secure a suitable place for the permanent international headquarters where the manifold activities provided for in the Constitution could be successfully augmented. How this undertaking of the struggling Institute was undermined at the very last minute by a vicious contemporary, whose hostile activities against the Institute are an open secret, in connivance with the so-called national Ministry during 1938 has been referred to by us in the last issue on page 129. If the true historical facts are to be made known, they are sure to more than blacken the character of one who professes to teach Yoga and others who pretend to run a "national" government. This never-to-be-forgotten blow—the darkest chapter in the history of the Institute—unsettled many of our proposed schemes for expansion.

French Government's Interest in Yoga

The Government of France deputed their Médecin-Général Dr. Binet-Sanglé to investigate personally the scientific claims of Yoga at the Yoga Institute. He paid an official visit to the Institute with the Vice-Counsul Monsieur Vanura on the 26th November. After his investigations, according to the *Associated Press* report, "Dr. Binet has been convinced that the therapeutic claims of Yoga were well-founded."

During 1939

On January 3, through a statement to the *Associated Press*, the Founder criticised the objections raised by the President in his address at the All-India Educational

THE YOGA INSTITUTE

STATEMENT OF ACCOUNT FOR THE PERIOD ENDING 26TH SEPTEMBER 1939

Cr.

INCOME			Rs	As.	Ps.
By Balance as on 4th November 1937:					
On hand	Rs.	18 6 6			
With Bank		18 1 11			
			36	8	5
„ Students and Patients	Rs.	5851 0 0			
Less Expenses		733 2 9			
			5117	13	3
„ Sale:					
Of Publications:					
Cash	Rs.	1242 14 3			
On Accounts		793 8 6			
Of Yoco		1861 4 9	3897	11	6
„ Membership			785	0	6
„ Donations			206	9	0
„ Deposit of Roberts Legzdins			639	6	7
„ Loan:					
@ 6%	Rs.	1855 0 0			
Temporary		768 12 0			
			2623	12	0
		Rs.	13,306	13	3

Dr.

EXPENDITURE			Rs.	As.	Ps.
To Publishing Department:					
Printing Expenses	Rs.	1317 7 0			
Binding		54 14 0			
Blockmakers		224 15 6			
Photographer and Artist		211 4 0			
			1808	8	6
„ Stationery, Postage, Press News and Telegrams			966	10	1
„ Freight Expenses			175	15	0
„ Headquarters:					
Rent Paid	Rs.	3264 0 0			
Salaries		2358 6 6			
Repairs and General Expenses		947 7 6			
			6569	14	0
„ Library Expenses			29	7	6
„ Advertisement Expenses			342	4	0
„ Interest Paid on Loan			137	11	0
„ Travelling Expenses			403	9	3
„ Equipment:					
Steel Cabinet for MSS.	Rs.	132 0 0			
Lecture Hall and Library		75 0 0			
Therapeutic and Laboratory		330 12 3			
			537	12	3
„ Living Expenses of Founder and His Family			1791	5	6
„ Balance:					
On hand	Rs.	352 5 6			
With Bank		191 6 8			
			543	12	2
		Rs.	13,306	13	3

Conference against popularising yoga postures through educational institutions in India.

"The Yoga asanas for mass training, when well selected, can be practised by any one without special concentration or will-power. They involve only the usual attention and effort required in any form of physical training, declared Shri Yogendra. When the yoga asanas are practised—especially for physical well-being—their beneficial physiological effects accrue in a scientific manner, irrespective of any possible need for meditative temperament.

"As to the static and dynamic forms of exercise, the yoga asanas, whose objective and contribution to the health of the internal organs are well-established, should find preference to that of training which merely seeks muscular development. Such a course evolved by the Yoga Institute is available to the public and is being vastly followed by leading health centres in the West."

On February 9, the Press announced the scheme for Yoga Colony outlined by the Institute. On February 10, the Founder spoke at the Town Hall on the "Health Value of Yoga." During the course of his lecture before the Health Sub-Committee it was explained that health was not only physical and did not mean the development of bulging muscles but, according to Yoga, it meant also the mental and moral health—a fact which is now getting recognized by the modern scientists. He deplored the attitude of the Indians who are always looking to the West for matters scientific and even Yoga had to be re-imported into India before the educated Indians ignorant of their own cultural heritage would accept it.

On May 10, Dr. Priya Darshi of Ceylon, the representative of Haile Selassie, approached the Institute for deputing someone competent to teach Yoga to the Emperor of Abyssinia who was anxious to be initiated in the practice to Yoga. On April 2 the Institute was invited to send a representative at the Pan-Asiatic Peace Conference held in Colombo.

On May 15, Dr. C. S. de Radwan-Pregalowski of Vienna University and Mr. Gautier Thon of Switzerland, under the auspices of the Institute, prepared the first Indian Cultural Film for international exhibit stressing the value of Yoga. On July 24, Bro. Roberts Legzdins, a graduate of the Riga University and a member of the Latvian branch of The Yoga Institute, arrived in Bombay for further studies. On July 26, Dr. Surendranath Dasgupta, on his return from the Continent after attending the International Congress of Religions at Paris, stayed at the Institute and discussed methods for establishing cultural relations with foreign countries.

In a statement appearing on another page, the accounts of the Institute have been brought upto September 26, 1939.

Finally, after having founded and maintained The Yoga Institute at tremendous sacrifice during personal proprietorship for twenty-one years, the Founder entrusted this Yoga heritage to the peoples of the world. Accordingly, on the most auspicious day of Ananta Caturdasī (signifying Infinity) the 27th day of September 1939, The Yoga Institute was registered as a Society under the Societies Registration Act

[*Continued on p. 166*]

ANNUAL REPORT
FOR THE YEAR 1940-41

PROGRESS IN VARIOUS DEPARTMENTS

THIS Annual Report records the manifold activities of the Institute during its twenty-third year of foundation. Even though due to increasing economic difficulties, no new undertakings were practicable during the year under Report, the usual routine at the Headquarters, however, has been sustained in various departments. The following represent specific achievements of interest :—

1. **Academic Researches :** Pending suitable endowment for this purpose, the collated MSS. of *Yogi* and/or *Yoga Yājñavalkya Smṛti* and/or *Saṃhitā*, completed last year, could not be published. The English translation of *Haṭhayogapradīpikā* with *Jyotsnā*, compared with over a dozen printed variants, embodying scientific terminology and exposition, is nearing completion. Due to lack of funds, no immediate action can be taken to expedite academic researches on Yoga at this central Institute, even though the import, need and scope of such work is immense.

2. **Scientific Investigations :** Research experiments have now been concluded on the yoga process of *neti*. The X-ray and screen findings have been critically compared with sectional studies of the normal human skull, and these have been further analyzed in the light of clinical observations at the Institute extending to over twenty years. Independent notes by one of the scientific corroborators of the Institute, Dr. John W. Fox, have also been recorded and incorporated in the main findings.

It is evident from these experiments that, the original process of *sāmānya* (thread type) *neti* (technique of nasal probing), while being described by the old authorities in the Sanskrit texts as one, is really three-fold. These have been classified by us as (*i*) Lower, (*ii*) Middle, and (*iii*) Upper *neti*, according to the three different routes within the nasal passages through which the probe is made to pass. The resultant hygienic and therapeutic reactions also differ widely and sometimes appear quite disconnected. For example, the treatment of eye diseases by stimulation of the lacrimal passages and of the optic nerves with the aid of Upper *neti* differs from the technique of the Middle and Lower *neti* generally applied in the treatment of affections of the air-sinuses and of nasal obstructions.

With the aid of these recorded data, skiagrams and actual photographs—which have not yet been published—it is now possible to ascertain the precise scientific value of three-fold *neti* as hygienic and therapeutic measure of extreme importance. Furthermore, these research findings of the Institute incidentally corroborate the claims of ancient authorities in favour of nasal hygiene (various forms of *neti*) which otherwise—in absence of scientific investigations—would appear exaggerated. It is gratifying to learn

that, in the West, Dr. Henry Lindlahr, Dr. John H. Kellogg (America), Dr. Georges Gautier (French Academy of Medicine) and other progressive medical practitioners have been employing a similar process (like *neti*) for the past many years with excellent results in the treatment of nasal catarrh, deafness, headaches, asthma, sinuitis, snoring etc.

3. **Yoga Library :** The following are recent additions to the Yoga Library, most of them being complimentary copies for favour of review :—

Uḍḍiyāna Bandha of Haṭha-Yoga, P. K. Gode ; *Bibliography of the Published Writings*, P. K. Gode ; *The Dvaita Philosophy and Its Place in the Vedānta*, (The University of Mysore) ; *Brahmavidyā, Vol. I, i*, (Adyar Library) ; *The Heart-Doctrine of Sri Bhagavad Gita*, (Suddha Dharma Mandalam Assn.) ; *The Supreme Element*, Dr. K. B. Lele ; *International Conciliation*, (Carnegie Endowment for International Peace) ; *Kapma-Tora* (Latvian language) ; *Naturismen*, (Danish language) ; *Indic Studies*, (The Library of Congress, U.S.A.) ; *Physical Exercises for Asthma*, (Asthma Research Council of Great Britain) ; *Mind and Vision*, Dr. R. S. Agrawal ; *Psycho-Solar Treatment for the Eye*, Dr. R. S. Agrawal ; *Sai Baba*, B. V. Narasimhaswami ; *Upadesa Saram*, (Sri Ramanashram) ; *Home and Village Doctor*, (Khadi Pratisthan) ; *Altruism*, (Dev Samaj) ; *One Man against Europe*, Konrad Heiden ; *Conspiracy Unveiled*, K. D. Anklesaria ; *Problems of Indian Nationalism*, (Indian Thinker Series) ; *Indian States and the Federal Plan*, Y. G. Krishnamurti ; and Thacker's *Commission Tables*.

It is to be regretted that due to temporary suspension for the past few years of the journal *Yoga*, the official organ of the Institute, no reviews could be published at present. We, however, thank the various Societies and individuals for having sent us their publications, and assure them that, soon on its reappearance, needful will be done. We have also to acknowledge with thanks the receipt of the following periodicals reaching the Library, in spite of our failure to keep up the mutual exchange due to economic reasons.

Philosophical Quarterly, Philosophic Abstracts, Quarterly Journal of the Mythic Society, Journal of the Assam Research Society, Shrine of Wisdom, The Indian Thinker, Maharaja Sanskrit College Magazine, Nagari Pracharani Patrika, Temple Artisan, Education, New History, Oriental Literary Digest, The Sunday Times, Home Education, Nature's Path, Theosophical News and Notes, The Canadian Theosophist, and *The Occult Digest*.

4. **Academy for Training :** Of the hundreds seeking admission for yoga training at the Institute, only ten deserving students were accepted for special study, during the year under Report. Of these, six were men and four women. Among them were a ruling prince from a Central India state, a Greek professor and a Fellow of the Royal Geographical Society now in Kashmir, a German physical instructress employed in South India, an American lady, and the rest from Bombay including the brother of a steel magnate. Serious students of Yoga are very very few, a majority of them having interest only in its physical application as hygiene, therapeutics or physical culture.

5. **Health Clinic :** Of the sixty-two cases accepted at the clinic, during the year, thirty-three were male and twenty-nine female patients.

These selections represent a wide range of test cases accepted purely on merit for compilation of clinical data at the Institute. Most of them were given-up and difficult chronic cases under the treatment of leading practitioners of various systems of medicine. They came from all parts of India and even the foreign countries. A local Baronet, a Maharani from one of the Indian States, and two "Society" ladies had to be refused admission on principle to conform to traditions of and discipline at the Institute.

The following few cases are indices of the highly specialized and varied clinical nature of activities undertaken at the Institute, including diseases of the blood, diseases of the lungs, diseases of the digestive organs and diseases of the nervous system.

B. coli in Urine and Blood : (Bom. 763) Mrs. A.A.I.R., age 26, had been suffering from the presence of B. coli both in urine and blood. Albumen in urine. Urea 6%. Pulse 100. Leukorrhea also present. Overweight from childhood. Excessive use of thyroid tablets for reduction has caused irritable heart. After two months of treatment at the Institute, her blood (tested and reported through her family physician) was found free from B. coli and the urine analysis quite normal except for slight acid reaction and the presence of only 1¼% urea. There were no pus cells or casts ; cultures found sterile. Pulse improved by 8% (100/92) with excellent reaction on the heart ; weight reduced by 3½ Lbs. with corresponding increase in strength (100/126 Grip) ; improvement in breathing capacity by nearly 20% (1800cc/2150cc). Headaches and symptoms of tiredness which were chronic disappeared leaving a feeling of general well-being.

Chronic Gastritis : (Bom. 735) Mr. H. M. H. A., age 37, was suffering from gastritis for over five years. Nausea after food. Extreme discomfort followed by palpitation of the heart. Evening meals had to be vomited to secure relief from pains and also to admit of some sleep. Overweight was responsible for the already distended stomach to be below its normal position and also for enteroptosis. The attending physician recommended him to join the Institute as a last resort. At the end of five months of treatment, he was a changed man. No gastric complaints of whatsoever nature. Able to take and enjoy four meals a day. Stools became regular without the aid of any laxative. Weight reduced by 17 Ibs. (168/151 Lbs.) with corresponding increase in strength by 40% (128/180 Grip). Waist reduced by 4½", and the spinal elasticity improved from 26"–27½" to 26½"–30½". The resultant gain in height due to improved abdominal contour and increased stretch of spine, notwithstanding his age, of nearly 1¼" is remarkable.

Dysentery : (Bom. 777) Mr. A. S. C., age 19, being found suffering from dysentery (bacillary), was removed from his studies at a hill station. He was continually losing weight and becoming weaker. Presence of streptococci and B. coli detected in stools (reported by independent bacteriologist in written statement). Loose stools, general debility and mental dullness present. Gastric discomfort both in the stomach and abdomen. Failing satisfactory progress, he was removed from treatment under one of the leading physicians of Bombay, and joined the Institute. At the end of treatment, limited to only two months, his stools were found well-formed and free from infection. He gained 6 Lbs. of weight (127/133 Lbs.) with corresponding increase in strength and endurance by nearly 10% (154*R.*/170*E.* Lbs.). Improvement in breathing capacity by 33% (2150cc/2750cc). Digestion, nutrition and elimination considerably improved. When discharged, he was in excellent health, full of energy and mentally alert and active.

Paralysis : (Bom. 755) Mr. D. P. D., age 59, was a chronic sufferer from indigestion and constipation. Nervous strain resulted in partial paralysis, more pro-

minently of the jaws, hands and legs. Wasting of muscular tissues was suspected and confirmed by medical experts. Felt suffocated when drinking or eating. Colon spastic ; volume of the heart low ; pulse 88. During the first month of treatment, the patient gained 2 Lbs. in weight (116/118 Lbs.), 30% in muscular strength (56/75 Grip), and 8½% in breathing capacity (1200cc/1300cc). Blood pressure reduced by 5% and pulse improved to 82. No more foul odour from the mouth ; colour of the tongue considerably better. General improvement in the condition of the heart, coördination of the muscles and also in other physical movements like walking etc. noticeable. Stools became regular and satisfactory.

Whooping Cough : (Bom. 759) Master M. A. I. R., age 8, was operated two years ago for adenoiditis and tonsillitis. After operation, the throat became septic resulting in continuous fever for over three months. Soon on recovery, he was attacked with whooping cough which continued to linger for over a year. Grand-son of a rich knight, no treatment was spared howsoever expensive but to no avail. Finally he was recommended to undergo treatment at the Institute, and when admitted was found suffering from continuous fits of sneezing and paroxysms. Wheezing in the lungs extremely prominent. During attacks at night lasting for hours, he suffered terribly from the usual feeling of suffocation with the face becoming cyanosed. Due to this malady, sleep was disturbed and, being chronic, it wore him down and kept him listless. He was accepted purely as a trial case. After two months of treatment, violent and frequent sneezing stopped. Lungs were normal free from any trace of wheezing. Sleep sound and undisturbed. Spasmodic paroxysms completely ceased. Breathing capacity indicated rise of nearly 83½% (600cc/1100cc) with corresponding increase in vitality by 25% (56/75 Grip).

Among other diseases treated with usual success at the Institute, during the period under Report, may be mentioned anæmia, arteriosclerosis, asthma, (general, nervous and sexual) debility, gastritis, gout, hysteria, neurasthenia, obesity, rheumatism, and underweight. Due to comparatively short period of treatment, even though indicating slight improvement, no definite cure could be effected in a case of (navel) hernia and another of neuritis complicated with anæmia and rheumatism.

6. **Publishing Department :** The Hindi (translation) MS. of *Yoga Personal Hygiene* so kindly volunteered by Syt. R. G. Gyani, Curator of Prince of Wales Museum (Archæological Section), Bombay, was not received before the end of this year. Due to heavy liabilities in arrears from the previous year, it was not considered advisable to either bring out a new publication or to revive the suspended journal *Yoga*, the official organ of the Institute.

7. **Cultural Activities :** During the course of this year, four public lectures on Yoga were delivered by the Founder. The first lecture was delivered on the 22nd December 1940, on "Yoga, the Future Culture", under the auspices of the Pravritti Sangha. On the 8th January 1941, another public lecture on "Yoga in Daily Life" was delivered at the Bombay University (School of Economics and Sociology) under the auspices of the History and Culture Committee. At the invitation of the Rotary Club of Bombay, the third lecture on "The Science of Yoga" was delivered on the 8th April 1941, before a distinguished audience. On the 13th August 1941, the Founder—who gave the first translation of *Gitanjali* and biography of

THE YOGA INSTITUTE, BOMBAY

INCOME & EXPENDITURE ACCOUNT FOR THE YEAR ENDING 30TH SEPTEMBER 1941

To,		Rs.	As.	Ps.
	Stock of Publications on Hand as on 30-9-40	9,681	8	0
,,	Rent	1,584	0	0
,,	Salaries	226	8	0
,,	General Expenses	454	7	6
,,	Stationery	128	0	9
,,	Postage	205	11	3
,,	Freight	42	3	6
,,	Conveyance	75	15	0
,,	Advertisement	110	0	0
,,	Clinic Expenses	232	1	6
,,	Library Expenses	38	7	0
,,	Bank Charges	2	14	0
,,	Book Binding	55	12	0
,,	Interest on Loan	1,300	2	0
,,	Auditor's Honorarium	30	0	0
,,	Founder's Honorarium	500	0	0
,,	Secretary's Honorarium	300	0	0
,,	Reserve for Foreign Debts	326	10	0
,,	Depreciation	568	13	4
,,	Excess of Income Over Expenditure Carried to Balance Sheet	1,683	4	11
	Total Rs.	17,546	6	9

By,			Rs.	As.	Ps.
	Patients' and Students' Fees				
,,	Sales		6,361	8	0
	Less goods returned	1,862 9 3			
		231 15 3			
,,	Donations		1,630	10	0
,,	Membership Subscriptions		707	10	6
,,	Discount Received		625	0	0
,,	Miscellaneous Receipts		8	12	0
,,	Stock of Publications on Hand as on 30th September 1941		5	0	3
			8,207	14	0
	Total Rs.		17,546	6	9

Examined and found correct.

P. G. BHAGWAT
Registered Accountants,
Auditors.

Bombay, dated the 13th October 1941.

BALANCE SHEET AS ON 30TH SEPTEMBER 19[illegible]

Funds & Liabilities.	Rs.	As.	Ps.

Property & Assets.	Rs.	As.	Ps.
Furniture, Deadstock & Instruments as per last Balance Sheet Rs. 3,928 5 4			

P. G. BHAGWAT
REGISTERED ACCOUNTANTS
AUDITORS

BALANCE SHEET AS ON 30TH SEPTEMBER 1941

FUNDS & LIABILITIES.

	Rs.	As.	Ps.
FOUNDER'S LOAN ACCOUNT	20,964	3	6
MRS. SITA DEVI'S LOAN ACCOUNT	4,241	11	0
RESERVE FOR DOUBTFUL DEBTS	326	10	0
AUDITOR'S HONORARIUM TO BE PAID	30	0	0
TOTAL Rs.	25,562	8	6

PROPERTY & ASSETS.

				Rs.	As.	Ps.
FURNITURE, DEADSTOCK & INSTRUMENTS						
Balance as per last Balance Sheet	Rs.	3,928	5 4			
Additions during the year		493	12 0			
		4,422	1 4			
Less 4 Dozen chairs sold	Rs.	96	0 0			
,, depreciation w/off	Rs.	232	0 4	328	0	4
				4,094	1	0
LIBRARY BOOKS						
Balance as per last Balance Sheet	Rs.	5,164	0 0			
Additions during the year		24	5 0			
		5,188	5 0			
Less depreciation w/off		129	13 0	5,058	8	0
COPPER AND ZINC BLOCKS						
Balance as per last Balance Sheet	Rs.	1,311	0 0			
Less depreciation w/off		131	0 0	1,180	0	0
X-RAYS, NEGATIVES, PHOTOS ETC.						
Balance as per last Balance Sheet	Rs.	1,520	0 0			
Additions during the year		11	0 0			
		1,531	0 0			
Less depreciation w/off		76	0 0	1,455	0	0
STOCK OF PUBLICATIONS ON HAND				8,207	14	0
STOCK OF PAPER FOR PUBLICATION AT COST				1,268	3	0
BOOK DEBTS FOR GOODS SUPPLIED ON CONSIGNMENT				1,145	6	4
DEPOSIT ON RENT ACCOUNT				132	0	0
STOCK OF PRINTING, ADVERTISEMENT, MATERIAL A/C				193	0	0
CASH & BANK BALANCES						
Cash on hand		128	7 2			
Cash with Bank		285	12 1	414	3	3
INCOME & EXPENDITURE ACCOUNT						
Balance as per last Balance Sheet		4,097	9 10			
Less excess of Income over expenditure for the year		1,683	4 11	2,414	4	11
TOTAL Rs.				25,562	8	6

We have audited the Balance Sheet of the Yoga Institute, Chowpatty, Bombay, above set forth and have obtained all the information and explanations we have required. In our opinion the above Balance Sheet exhibits a true and correct view of the state of the Institute's affairs according to the best of our information and explanations given to us and as shown by the books of the Institute.

P. G. BHAGWAT
REGISTERED ACCOUNTANTS
AUDITORS.

Bombay, dated the 13th October 1941.

Poet Tagore—presided at a public condolence meeting organized by students and lovers of Culture and Art in Bombay at F.G.S. Mandir to pay homage to the sacred memory of the late Dr. Rabindranath Tagore, the torch-bearer of modern cultural renaissance in India. As usual, during the year under Report, over a thousand enquirers from all sections of the public throughout India personally visited the Institute and an equal number applied through correspondence for advice on matters scientific and cultural.

FINANCIAL SURVEY

Introductory : With a loss of over Rs. 4,000/- brought forward from the last year, the economic outlook for this year was rather gloomy. It was equally impossible to forecast a balanced budget when it is realized that certain minimum annual recurring expenses to sustain various activities at the Headquarters had to be met with without any corresponding relief being available in form of fixed revenue from Reserve or Funds of whatsoever nature. It meant then that the very existence of the Institute was possible only by adding to the losses each year. It is also becoming evident that the incorporation of the Institute, after twenty years, as a registered Society has caused no radical changes favourable to its economic stability. During this year under Report, as in all the previous years, it is still the Founder who has to bear the cross since the total public contributions in all these years were hardly sufficient to meet expenses of even a single year.

Income : The rise in the income of Fees from the students and patients amounting to Rs. 6,361-8-0 is due to the revised new policy which the Institute had to adopt in light of our previous bitter experience. For many years, the Institute had served the public at ridiculously low rates (i.e Rs. 10/- ; 15sh. ; $3.00 per month including even the cost of actinotherapy), at the risk of actually incurring losses each year. This was suffered in the spirit of service credulously believing that individual gratitude and philanthropy will ultimately prevail. But the rich not merely exploited the services of the Institute but even became increasingly exacting. False promises were held out, both oral and written, by the rich and the so-called philanthropists who needed the services of the Institute but nothing materialized. In the meantime, the Institute kept paying its pound of flesh for existence. At this critical stage, a decision to protect the future economic stability of the Institute became inevitable. Since the Institute has been maintained largely on the personal labour of only two people—the Founder and the Secretary—it was decided that the time-value of their services to the public should be so adjusted as not only to make the Institute self-supporting but even to allow some margin for gradual progress in spite of the selfish and thankless public. The result of this decision is obvious.

The sale of publications amounting to Rs. 1,630-10-0, considering the fact that foreign sales have been reduced to minimum due to present abnormal conditions of war, may be regarded as very satisfactory.

With the addition of two new Members during this year, the present strength of the Members of the Institute under its permanent registered constitution has increased from twelve to fourteen. The new Members whom we welcome for coöperation in the great programme of the Institute are :—

1. Rustom Jamshed Irani Esq., (Fellow), Merchant, Hubli.
2. Fakrudin S. Barodawalla Esq., (Life Member, balance pending), Merchant, Bombay.

The membership subscriptions for the year amounted to Rs. 625-0-0. To this may be added voluntary donations of Rs. 707-10-6 making a total of Rs. 1,332-10-6 being the public contribution for this year representing nearly 12½% of the net income. The donations have been most gratefully received from Gautier Tibon Esq., Mexico City (S. America), Rs. 9-0-6 ; Mrs. F. Episcopo, Bombay, Rs. 10-0-0 ; Syt. N. S. Iyengar, Bangalore, Rs. 7-0-0 ; Syt. H. A. Buch, Bombay, Rs. 17-6-0 ; Abdulla Ibrahim Rahimtoola Esq., Bombay, Rs. 255-0-0 ; Miss Sophy Kelly, Bombay, Rs. 50-0-0 ; H. M. H. Ahmed Agbotwalla Esq., Bombay, Rs. 150-0-0 ; Anonymous, Rs. 2-0-0 ; Sir Sultan Chinoy, Bombay, Rs. 150-0-0 ; Sister Vajirā, Sarnath, Rs. 39-4-0 ; Syt. Dahyabhai P. Patel, Sojitra, Rs. 15-0-0 ; and the University of Mysore (pay in kind), Rs. 3-0-0.

The miscellaneous receipts of Rs. 13-12-3 include discount on bills and the balance of suspense account now closed.

Expenditure : The expenses of Rs. 3,666-3-10 for maintenance of the Headquarters, including even the amount of Depreciation of Rs. 568-13-4, show a further decrease of 1½% over the average expenditure of the last year. Interest on Loans amounted to Rs. 1,300-2-0. Fortunately, during this year under Report, it has been possible to reduce this capital liability by Rs. 2,282-1-10. We hope that at a near date it may be possible for the Institute to pay off all its existing Liabilities if only the Members and the sympathizers of the Institute would do their duty by extending further economic coöperation.

The net income for the year, including stock of publications, was Rs. 17,546-6-9 as against the expenditure of Rs. 15,863-1-10 thus reducing the loss of the previous year to Rs. 2,414-4-11 as shown in the Balance Sheet. Reserve for foreign debts represent amounts due against Consignment sale accounts in belligerent countries.

While one-third of the Institute's revenue is derived through the personal services of the Secretary, Sm. Sita Devi, only an insignificant honorarium averaging Rs. 25-0-0 per month could be offered to her, consistent with the economic resources of the Institute. It is no exaggeration to state that but for her whole-time voluntary services neither the manifold activities nor the economic structure of the Institute could have survived the present strain.

Further, by accepting only Rs. 42-8-0 per month towards honorarium,

the Founder—by persistently refusing to exploit for personal gain the special economic privilege granted to him under the Constitution—has repeatedly shown extreme self-restraint and concern for the future security of the Institute. Thus this foremost pioneering international Foundation, which is historically responsible for Scientific Yoga Renaissance, to-day exists as a symbol of sacrifice, suffering and devotion of a single man, its Founder.

CONCLUSION

In conclusion, it may be pointed out to the yoga-inclined public who have not yet fully realized, due to false, exaggerated, conflicting and unyogic propaganda incessantly carried on by the ever-increasing yogic āshrams, dhāmas, health centres and physical culture institutions, the following :—

(*i*) That this Institute is the *original pioneering Foundation* which undertook, *nearly a quarter of a century ago*, the scientific exposition and teaching of Yoga and the application of Yoga-therapeutics.

(*ii*) That, therefore, most of the so-called yogic institutions started after the year 1918 A.D. have, in fact, merely copied a part of the Institute's programme, plagiarized its literature, exploited its scientific findings, and are still continuing to do so.

(*iii*) That as the academic and scientific research *alma mater*, this Society functions in the capacity more of a yoga technical training and medical institute than yogic gymnasium for the mere practice of āsana and prāṇāyāma.

(*iv*) That due to such specialized and qualitative service, the Institute, at present, cannot undertake to train students or treat patients *on a mass scale* or *for fees which may be available elsewhere*.

If the interested public or the State feel that these beneficial activities should be expanded so that the benefit thereof may be made available to the rich and poor alike, they should come forward to provide the wherewithal for such facilities.

Moreover, besides economic strain, the Institute has also to bear with patience local intrigues by unscrupulous contemporaries one of whom exerted so far as to stab the Institute in the back with the aid of the Congress Ministry during the year 1938. This administrative scandal is too well-known to need repetition. No wonder, therefore, that during his recent visit to the Institute, Sir S. Radhakrishnan, the Vice-Chancellor of the Benares Hindu University was constrained to observe in his statement that the lack of Funds and facilities to the Institute "*is a shame which we must remove*".

The above Report was read and passed unanimously at the last Annual Meeting of the Governing Body held at the hall of the Institute on the 3rd December 1941.

Around the World

Denver, U. S. A.

"The copy of your magazine has been received, read and reread with interest. This is the correct approach to Yoga for the Western World. They worship science almost, if not *practically*, with greater fervour than the All, and once the wedge of *scientific proof* is driven in the light will circulate and Yoga will grow rapidly. The great problem then will be *qualified teachers*. The cause of Yoga must go forward by leaps and bounds once this question is settled.

For the West, Yoga must have the sanction of science, especially the medical and surgical doctors ; and once this is obtained, it will take its place in the affairs of men to which by its nature it rightfully belongs—and that place is the very pinnacle of all thought and action. I bow to your souls."

Capt. Ed. L. Bloom

Mexico, D. F.

"Dr. Peters writes the following words 'I am just in receipt of the books from the Yoga Institute of Bombay for deposit in the Crypt of Civilization. This is indeed a splendid cooperation and fulfils a desire on my part to include the *authentic material* on Yoga which I have known and studied for a number of years.'

"I am waiting for the second copy of your book for securing the Copyright in Washington before offering to bookstores and agencies in Mexico and the United States.

"Dear Master, my wish to do something really useful for The Yoga Institute is so great and what I have done till now is so little that I feel disinclined to trouble you further unless and until I am able to show practically my interest in your great Institute."

Gautier Tibon

Milano, Italy.

"It is a pity that except *Yoga Personal Hygiene* no further volumes of the Scientific Yoga Series have appeared thereafter. We hope to interest some academical and scientific Institution of our country and also to help to continue further researches on Yoga.

"Let us know whenever you get a new book ready in this series for we are glad to translate all your scientific books and make you and your Institute well-known in our country.

"You can be sure that we will do all our best for a valuable cooperation and try to carry on your highly scientific and cultural work in our country."

Carlo Torreano

Rangoon, Burma.

"It has given me great pleasure to read about The Yoga Institute in the papers. You are doing yeoman's service with regard to the advancement of the study and appreciation of true scientific culture. My fervent prayer to God is that the efforts of you both may be crowned with success. With pranamas."

Dr. G. Subramanian

Moradabad, U. P.

"I am reading your books with great interest these days. These have been kindly lent to me for perusal by the D. S. P. now under training at the P. T. College. They are very ably written in a thoroughly scientific way which shows the vast learning and deep knowledge of Oriental teachings, Sanskrit and Western sciences."

Dr. C. S. Sharma

Kalimpong, Bengal.

"I always keep your instructive publications with me and have gone through them many times. Since my school days I used to read lots of literature on health, hygiene and physical culture by foreign authors. But none of them so simple and instructive as yours.

"I am now a firm believer in Yoga methods for health, though my knowledge is still limited in Yoga Science. I however have a great desire to spread Yoga's Ways to Health in Burma and request you to kindly assist me with suggestions."

Maung Ba Kin

OFFICIAL PUBLICATIONS

YOGA Vols. I, II, III, & IV

These volumes of the Journal *Yoga* supply to the initiate the graded course of study both in theory and practice. *Fully Illus.* Rs. 11 ; 20s. ; $5.00

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—*Drew University*

SCIENCE OF YOGA

An historical perspective dealing with the scientific Yoga movement and evaluation. *Fully Illustrated. 2nd Ed.* Re. 1 ; 2s. ; 50c.

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A new scheme of physical education based upon dynamic yoga postures and harmony of breath. *Fully Illustrated. 3rd Ed.* Re. 1 ; 2s. ; 50c.

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"It supplies an ideal course of daily exercises."—*Health*

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Yoga practices for the care of the various organs of the body.

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"It gives you all the absolutely essential information on healthful living."

—*Medical Talk*

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Initial study in yoga fundamentals. *Illus. 2nd Ed.* As. 12 ; 1/6 s. ; 40c.

"For all beginners, the above book is the safest guide available. The treatment of the subject is scientific and is as exhaustive as reliable."—*Tribune*

POSTURES FOR WOMAN (*Yoga for Woman*)

By Mrs. Sita Devi. The only text guiding the gentle sex in their study of Yoga. *Fully Illustrated. 2nd Ed.* As. 12 ; 1/6 s. ; 40c.

"Her book merits the attention of all intelligent girls and women who value their health of body and mind."—*Daily Herald*

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