In the final analysis, it is only by microscopic examination of the suspected tissue itself that one is able to make a definite diagnosis of a benign or a malignant condition. From a theoretical standpoint, there is always a possibility of dissemination when a biopsy is done, but the possible harm is much less than the good it accomplishes for the patient. However, when done, suitable treatment should be carried out immediately so as to lessen such a danger; this is especially true where the surgeon must cut through normal tissue to reach the suspected lesion.

Within the last few years the use of aspiration biopsy has come to the front. It is particularly useful where the treatment is to be radiological, rather than surgical; but even where surgery is contemplated after preoperative radiation, it is advisable, as it not only makes a definite diagnosis possible, but it acts as a guide in establishing some criterion as to the amount of therapy that should be given.

These are the advantages, but there are certain disadvantages also. When positive the method is excellent, but where the aspiration is negative it means little one way or the other. For instance, in suspected Hodgkin's and lymphosarcoma it is to be condemned, for even when an entire node is removed the pathologist may have difficulty in arriving at a correct conclusion; so, wherever feasible, the regulation method of biopsy is preferable.

It is very commendable of Doctor Pflueger to focus our attention on biopsy again. Whatever progress we hope to make in the early recognition of cancer must necessarily be along these lines. The method of doing a biopsy is of secondary interest; it is the interpretation of the tissue that is of paramount importance.

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George S. Sharp, M. D. (605 Professional Building, Pasadena).—We have heard a complete treatise on the subject of biopsy, and only certain statements that Doctors Pflueger and Stowe have made need emphasis.

The preliminary working diagnosis should be based primarily on a thorough history and complete physical examination. Special examinations, such as transillumination, are important diagnostic procedures, and should always be performed when of advantage for the most accurate clinical impression. Information gained from the above examinations should enable the physician to determine the correct diagnosis in at least 85 per cent of the patients.

Pathological confirmation of the diagnosis is desirable many times before treatment is started, when the clinical findings are not definite. Frequently a radiation program is planned, or preoperative x-ray therapy is advisable, and a pathologic report is most necessary for the tissue structure and degree of anaplasia. The proper dosages of radiation must be based on this microscopic study.

The aspiration biopsy is of great value for the above material in certain cases. By this procedure, a tissue examination is possible without risk (Ewing, Stewart) and without loss of time and wound healing, and it is a procedure that may be performed without hospitalization or delay. The aspiration biopsy may be used for many ulcerated tumors. This procedure is used regularly for locating and identifying intracranial tumors. I have found the procedure of very definite value in identifying metastatic lymph nodes, tumors in the upper lobe of the lungs, or those located well out in the parenchyma, beyond the reach of the bronchoscope. Complete differentiation cannot always be made upon the smear, but the question of malignancy can be settled. This type of tissue study does not make it possible to differentiate between the different members of the lymphoblastoma group and Hodgkin's disease.

The reason for this discussion, I believe, is to condemn the hasty operation for diagnosis, and to replace it with a more complete and effective program which is based on the complete clinical findings (with a possible aspiration diagnosis) in order that no step in the attack against a malignant growth is omitted.

THE LURE OF MEDICAL HISTORY†

QUACKERY AND NATUROPATHIC LOGIC IN 1795–1825

By Harold M. F. Behneman, M.D.
San Francisco

REMEMBERING that, in the year 1934, the electorate of California were called upon to vote on the Naturopathic initiative (No. 9), it is interesting to review the same unscientific concepts and biased logic which existed one hundred and fifty years ago.

CULTIST SAMUEL THOMSON'S BOOK: THE "NEW GUIDE TO HEALTH; OR, BOTANIC FAMILY PHYSICIAN"

On February 9, 1769, one Samuel Thomson was born, to later become an outstanding cultist in the State of Massachusetts. In the fifty-third year of his life, and in the forty-seventh year of American Independence, he persuaded one Horton Howard of Columbus to publish a volume of one hundred and twenty pages entitled, "New Guide to Health; or, Botanic Family Physician."

By 1827, this book had run through four editions. Like the majority of modern cultist publications, it divided its contents into two main parts—first, the experience and theories of its author, and, secondly, the usual attack upon the medical profession. We learn that the tendency of lay practitioners today to sell, patent or copyright their wares, is at least a century and a half old.

On page 1 of his book, Mr. Thomson reveals his true colors as a cultist in the following utterance, so characteristic of an unscientific mind, devoid of knowledge concerning the fundamental elements of Hippocratic medicine, stating his "Agreement," frequently italicized by himself: "The subscriber, who is the discoverer and proprietor of the system of medical practice contained in this work, agrees to give, whenever applied to, any information, that shall be necessary to give a complete understanding of the obtaining, preparing and using all such vegetables as are made use of in said system, *to all those who purchase the right;* and the purchasers, in consideration of the above information and also what is contained in this book, agree, *in the spirit of mutual interest and honor, not to reveal any part of said information, to any person except those who purchase the right,* to the injury of the proprietor, under the penalty of forfeiting their word and honor, *and all right to use of the medicine.* And every person who purchases the right, is to be considered a member of the Friendly Botanic Society, and entitled to free intercourse with the member for information and friendly assistance."

† A Twenty-five Years Ago column, made up of excerpts from the official journal of the California Medical Association of twenty-five years ago, is printed in each issue of California and Western Medicine. The column is one of the regular features of the Miscellany department, and its page number will be found on the front cover.

To further prevent humanity and science from stealing his thunder, he had John W. Davis, clerk of the Massachusetts District, in 1822, file copyright claims to the title *and contents* of his book.

HOW CULTISTS REPEAT THEMSELVES

In the "Introduction," his defense of his methods, and his opening attack upon doctors of medicine, reveal his inferiority complex. Today, in the chaos of our times, we recognize the tendency of cultists to depend upon one or a few modes of therapy for a wide variety of conditions. All we need do, in proof of this, is to peruse the newspaper advertisements of the quack, the charlatan and the parasites that prey upon honest medicine. It is an old story, for here we find over a century ago Mr. Thomson's statement:

"If, then, a medicine is good in any case, it is because it is agreeable to nature, or this principle of life, the very opposite of disease. *If it is agreeable in one case, it must be absolutely so in all.*" (Italics by this author.)

Does not this resemble a modern advertisement of the colonic irrigationist, et al?

After informing the countryside of the magic healing power of vegetables, he states:

"This greatly disturbed the learned doctors, and some of them undertook to destroy me, by reporting that I used poison: though they made no mention of my using their instruments of death, mercury, opium, ratsbane, nitre and the Lancet."

In combating the forces which seek to menace the public health standards so sanely and patiently

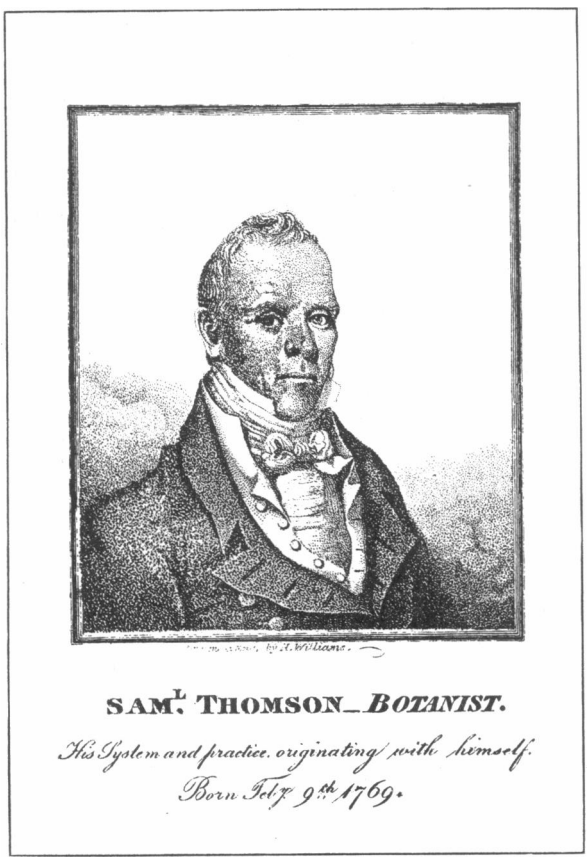
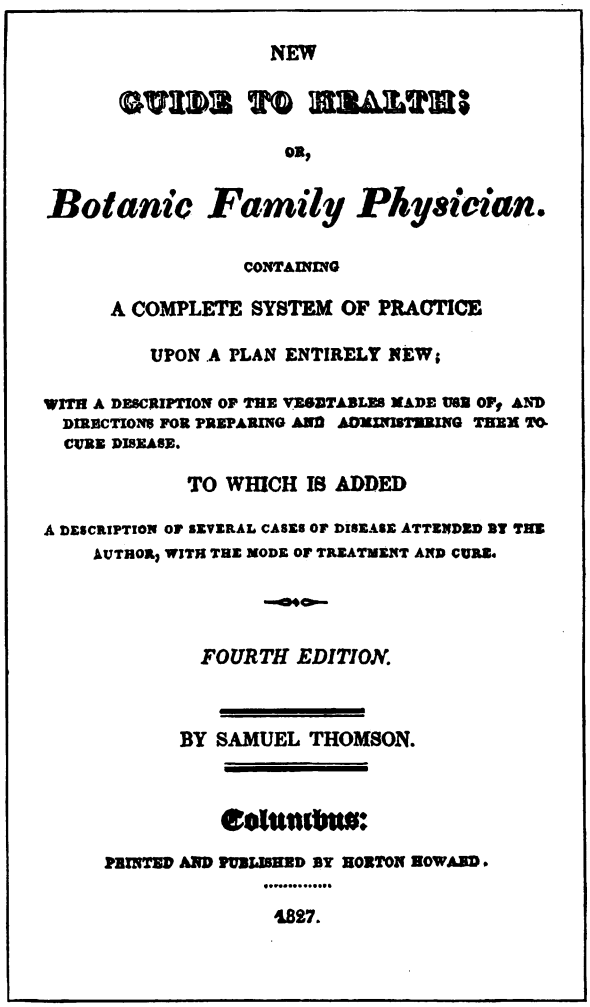


Fig. 1.—Samuel Thomson.



NEW

GUIDE TO HEALTH;

OR,

Botanic Family Physician.

CONTAINING

A COMPLETE SYSTEM OF PRACTICE

UPON A PLAN ENTIRELY NEW;

WITH A DESCRIPTION OF THE VEGETABLES MADE USE OF, AND DIRECTIONS FOR PREPARING AND ADMINISTERING THEM TO CURE DISEASE.

TO WHICH IS ADDED

A DESCRIPTION OF SEVERAL CASES OF DISEASE ATTENDED BY THE AUTHOR, WITH THE MODE OF TREATMENT AND CURE.

FOURTH EDITION.

BY SAMUEL THOMSON.

Columbus:

PRINTED AND PUBLISHED BY HORTON HOWARD.

1827.

Fig. 2.—Title page of the "New Guide to Health," published in Ohio in 1827.

built up by scientific medicine, we might consider, at least for its immediate effectiveness, the adoption of methods used by the physicians of Massachusetts in 1800! For, as Mr. Thomson states:

"A plan was once laid to take me in the night, but I escaped . . . next, I was bound in irons and thrust into prison, to be kept there through the winter without being allowed bail."

How analogous to the modern cultist's high pressure sales talk is this:

"The practice of the regular physicians, that is, those who get a diploma, at the present time, is not to use those means which would be most likely to cure disease; but to try experiments upon what they have read in books, and to see how much a patient can bear without producing death. After pursuing this plan during their lives, they know just about as much as they did when they began to practice. . . ."

SIMILARITY TO MODERN CULTIST ADVERTISING

In the light of modern cultist advertising, however, the *pièce de resistance* of Mr. Thomson's essay is the final paragraph of his introduction; to wit: "There is . . . one general cause of disease and one general remedy."

If we close our eyes a moment and visualize the present tactics of the cultist, we can, with

District of Massachusetts, to wit:

DISTRICT CLERK'S OFFICE.

BE it remembered, that on the twenty-third day of November, A. D. 1822, in the forty-seventh year of the Independence of the United States of America, Samuel Thomson, of the said District, has deposited in this office the title of a book, the right whereof he claims as author and proprietor, in the words following, to wit:

"New Guide to Health; or, Botanic Family Physician. Containing a complete System of Practice, upon a plan entirely new; with a description of the vegetables made use of, and directions for preparing and administering them to cure disease. To which is added a description of several cases of disease attended by the author, with the mode of treatment and cure. By Samuel Thomson."

In conformity to the act of Congress of the United States, entitled "An act for the encouragement of learning, by securing the copies of Maps, Charts and Books, to the Authors and Proprietors of such copies, during the time therein mentioned;" and also to an act, entitled "An act suplementary to an act, entitled 'An act for the encouragement of learning, by securing the copies of Maps, Charts and Books, to the Authors and Proprietors of such copies, during the times therein mentioned; and extending the benefits thereof to the Arts of Designing, Engraving and Etching Historical and other Prints."

JOHN W. DAVIS, *Clerk of Mass. District.*

Fig. 3.—Photograph of notice of copyright of title of his book, granted by the District of Massachusetts, November 23, 1822.

amazing reality, transplant intact this paragraph, written one hundred and twelve years ago, into 1934; for it smacks of the faddist's sales talk:

"The practice of giving poison as a medicine, which is so common among the medical faculty at the present day, is of the utmost importance to the public; and is a subject that I wish to bring home to the serious consideration of the whole body of the people of this country, and enforce in the strongest manner on their minds the pernicious consequences that have happened, and are daily taking place by reason of giving mercury, arsenic, nitre, opium and other deadly poisons to cure disease."

Later, in this same book, his "New Guide to Health," the author deals a severe blow to our conception of the importance of "bedside manner," personality, etc. Unintentionally, probably, he classifies all physicians into two groups, skillful ones and fools; for he writes: ". . . for poison given to the sick by a person of the greatest skill will have exactly the same effect as it would if given by a fool." What a fitting phrase that would be for the title page of a pharmacology textbook!

Most of us, in the practice of medicine, have heard facetious remarks from patients, such as "It's fashionable to have your tonsils (or appendix) out." It is not new, for in 1822 the botanist wrote: ". . . the doctors have no system . . . almost every great man among them has had a system of his own, which has been followed by their adherents till some other one is brought forward more fashionable."

Mr. Thomson, in a matter of one hundred pages, lists the vegetables, herbs and remedies he considers of value. Their origin, their characteristics and their uses are minutely recorded. The diseases for which they are specific are also named, as well as the manner in which they must be used. Those of us who unfortunately tune in on some so-called medical and health talks over the air soon learn from the nauseating misinformation that the majority of "regular speakers" use numbers for drugs or their combinations, such as "take my powder No. 4 for ulcers, No. 11 for sinus trouble, etc." Alas, even this is not new! Mr. Thomson has all of his drugs, potions, mixtures and remedies numbered. And what is more, he advises for "ague in the face . . . a dose of tea No. 3, a dram of No. 6 . . . then tie a small quantity of No. 2 in a fine piece of cloth, wet with No. 6 . . ." etc., etc.

THOMSON'S CLASSIFICATION OF REMEDIAL AGENTS

Of the maze of diseases and remedies, all of the latter seem to fall into two classes: those which he has found to succeed, and those that have failed. His reasoning is remarkably modern, in relation to the quack and charlatan of 1934; in other words, when a cure was effected the

medicine did it, but when a failure came, he had numerous excuses to give for it. As in the present field of physical medicine which the laity uses extensively without legal or moral curb, some of the modalities are bound to help—the majority of all sick people feel better, at least temporarily, if they have heat, massage, hydrotherapy, rest exercise, etc. And in the minority of cases that fail to improve, the quack has a ready excuse. Here in this eighteenth century volume are two perfect examples of such reasoning.

The first is one of Samuel Thomson's prized remedies. Of it he says: "In fact, there is hardly a complaint, in which this useful medicine cannot be used to advantage." It is listed as "No. 6—Rheumatic Drops." Gaze upon the compound and you will see that enough of this mixture will easily have one so alcoholic that mere pain, as well as other things, will not matter! The treatment is as follows: "One gallon fourth proof brandy, one pound of gum myrrh, one ounce of cayenne pepper. Boil a few minutes or let stand six days." Mr. Thomson states there are two uses for this unfailing remedy: "To remove pain and *prevent mortification.*" (Here, the italics are mine.) In fact, if I am not mistaken, most pathological laboratories are still immersing human tissue in alcohol "to prevent mortification."

And now, to the other extreme, Mr. Thomson's remedy for "cancers of the breast." He writes:

"One of them was as large as a half-peck measure and grew fast to the breast bone. I carried the woman through a course of medicine several times, and applied a poultice of butternut shucks . . . and continued this course for some months, until the bunch had more than half dissolved and had grown off from the bone . . . but she was *taken with a fever in my absence and died.* The other two . . . nature was *too far exhausted* to *complete* a cure." (Again, the italics are mine.)

At times, it appears that Mr. Thomson had some leanings toward faith healing, for he admits the presence of parasites in the body, but refuses to acknowledge the fact of their pathogenicity:

"A great deal is said about worms causing disease. There was never a greater absurdity than . . . the opinion about worms causing disease. The fact is they are created and exist in the stomach and bowels for a useful purpose and are friendly to health . . . they never cause disease, but are caused by it. Those who are in health are never troubled with worms, because they are then quiet and exist in their natural element."

THOMSON'S CONCEPT OF PHYSIOLOGY

The botanist-author was adept at forming strange conclusions to fit his own theories of physiology, to wit:

"When the stomach is diseased . . . the worms try to flee from their danger . . . and they sometimes get into knots and stop the passage to the stomach. Much more might be said on . . . the dangerous practice of giving medicine to kill worms."

Concerning consumption, Mr. Thomson feels that the doctors are grossly in error when "This complaint is called . . . a hectic fever . . . for there is no fever about it . . . the only difficulty is to raise a fever."

Down through the ages have come five metals that scientific medicine still uses for syphilis and anemia. Of these five the ancient cultist has this to say:

"Avoid all minerals used as medicine, such as mercury, arsenic, antimony . . . copper or lead. They are all poison and deadly enemies to health."

One of the author's firm beliefs is:

"The medicine necessary to remove the complaint must be applied to that part where the disease is seated; if in the stomach only, by taking the medicine, it may be removed; but if in the bowels the same compound must be administered by injection . . . as the grand object is to warm the bowels."

THOMSON'S FAMILY MEDICINE CHEST

There was little need of a drug code in the days of Samuel Thomson. If his ideas had been widely accepted, but few drug stores could have existed, for here is his entire stock of medicine for a family for *twelve months:*

"STOCK OF MEDICINE FOR A FAMILY.

1 Oz. emetic herb
2 Oz. cayenne
½ Lb. bayberry root bark
1 Lb. poplar bark
1 Lb. ginger
1 Pint of rheumatic drops

"This stock will be sufficient for a family for one year, and with such articles as they can easily procure themselves when wanted, will enable them to cure any disease, which a family of common size may be afflicted with during that time. The expense will be small, and much better than to employ a doctor and have his extravagant bill to pay."

Even in the dull 1790's all the cultists hid under one cloak, and dragged with them all those irregular practitioners possible to increase their support, as evidenced by the following concerning obstetrics:

"Many men . . . have attended . . . their own wives, and I have never known of an instance of any bad consequences; and if young married men would adopt the same course, it would be much more proper and safe than to trust their wives in the hands of young inexperienced doctors . . their cruel and harsh treatment in many instances would induce the husband to throw them out of the window."

One hundred and fifty years of medical progress have passed since publication of this popular volume, in its fourth edition in 1827 and reissued in 1849, six years after the author's death; and yet despite this progress not only in science, but in civilization, over 110,000 California voters in 1934 signed the Naturopathic initiative petition, contributing to so much additional turmoil in the election campaign of that year. What a pity Samuel Thomson cannot be alive to join forces with some of his modern day successors! His thirty years' experience are not needed here—we have *advanced:* if some of the proposed initiatives become laws, only a general school education of less than full high school standards would be necessary, plus a few enlightening weeks in a cultist school, to enable the botanists of 1934 to practice medicine and surgery in California!

Shades of Hippocrates!

384 Post Street.