the people's disease must be taken up everywhere with energy.

CASE III. The repulsive condition of this young woman's mouth (Fig. 9) is not only a check to her physical and mental development, but is a far-reaching element in preventing her earning a good living.

When every town establishes school dentistry, then these infected mouths, full of carious teeth, with exposed and gangrenous pulp, putrid roots and tumorous fistula, will disappear and with them a great many pale cheeks, dull eyes, fetid breaths and indications of nervousness, all symptoms of anemia and gastritis.

CONCLUSIONS.

Dental caries, or tooth-rot, is the most prevalent disease that attacks man, and is a pre-eminent factor in the causation of other diseases in the human body. This initial disease is the cause of great physical suffering, to check which many millions of dollars are annually spent in this country. Thus, to prevent dental caries would be a great financial saving, and a very great step in preventive medicine. Since this disease is a problem of the civilized world, it should be further investigated; and to aid investigation money should be provided to secure the most eminent men in research work.

In the present state of scientific knowledge, the most adequate means of combating dental caries and oral sepsis is by the enforcement of hygienic measures. In order to make his hygienic fight successful, the physician and the surgeon should co-operate with the dental practitioner, for this branch of hygiene requires a thorough knowledge of the teeth and their adjacent tissues. Skilled dentists, therefore, should be placed upon the various hospital staffs to treat this infected area which so materially hinders both surgical and medical treatment. Dentists should give the nurses instruction in the hygienic care of the teeth. Dentists should also be placed upon the staff of medical inspection of the public schools, for the condition of the child's mouth is just as important to its health as the condition of its throat and nose.

COLLATERAL READING.

Micro-organism of the Human Mouth, by W. D. Miller, M.D., D.D.S., Sc.D., Ph.D.

Essentials of Bacteria, by M. V. Ball, M.D.

A Contribution to the Study of Mouth Bacteria, by S. A. Hopkins, M.D., D.D.S.

Diseases of the Stomach and Intestines, by Prof. E. C. Ewald.

Various writings, by D. D. Smith, M.D., D.D.S.

The (Periscope) Dental Cosmos.

THE PEOPLE'S DISEASE: HOW TO PREVENT IT.*

BY WILLIAM R. WOODBURY, M.D., BOSTON.

THIS account of the growth of the crusade for the better care of the teeth will convince you, I am sure, that the movement should be organized.

The plan which is suggested creates an organization which will give it a permanent foundation

* Read before the American Academy of Dental Science, Oct. 2, and before the Boston and Tufts Dental Alumni Association, Dec. 11, 1907.

and will permit effective work to be done in the broadest possible field and most comprehensive manner. Boston has six dental societies. My suggestion is that a Dental Hygiene Council of the allied dental organizations of Boston be created; that council to consist of seven members, one from each of the six dental organizations, save the Metropolitan Dental Society, the largest, and that society to have two representatives on the council; and that this council help encourage and promote better care of the teeth by:

1. Putting into wider circulation the leaflet on the "Care and Use of the Teeth."

2. Furnishing literature on dental hygiene, and information and assistance in promoting the cause.

3. Providing popular exhibitions — charts, photographs, instructions, literature — for settlements, schools and institutions.

4. Giving practical talks on the care of the teeth, and popular and timely articles to the newspapers — country and city.

5. Co-operating with the organizations working to check and control tuberculosis.

6. Providing lists of registered skilled dentists who will work for nominal fees for deserving and worthy persons.

7. Discouraging the sale and use of dental preparations injurious to the teeth.

The City of Boston maintains six free gymnasiums. These and the public baths constitute the Municipal Bath Department — a city department created and maintained to promote the physical and moral welfare of the community. They are institutions which come in the closest touch with the homes of the people; their central idea is to promote good health. Last winter in these gymnasiums the children's teeth were examined. It was a part of the constructive work in hygiene which is being carried on by the Bath Trustees. One definite fact emerged from this examination. That fact was that there was a crying need to encourage children to take better care of their teeth. There was hardly a child that had good teeth; many of their mouths looked like a burnt district; only a very small percentage of the children ever cleaned their teeth; many of them never used a tooth brush; and not a few shared the use of one of the family tooth brushes — the mother and girls having a common tooth brush, and the father and boys using but one brush between them. The best results in physical training and development can be obtained only when all the organs of nutrition are sound and can do their work properly. A complete knowledge of the physical needs of the body includes a knowledge of the care and use of the teeth. A proper regard for the body demands good teeth.

To help those who use the municipal gymnasiums to get the largest benefits, and to promote a wider knowledge of the hygiene of the teeth and mouth, to help the people who need them to obtain these advantages, a practical working plan was set going in these gymnasiums for creating an intelligent interest in better care of the teeth. A leaflet on "The Care and Use of the Teeth" was

prepared and distributed; short, practical and interesting talks on the teeth and health are given the gymnasium classes; and an opportunity is extended to those who use the gymnasiums to come to the gymnasium doctor — each gymnasium has a man and woman medical examiner — to have the teeth examined. The children and the women and men who have a dentist are advised to consult that dentist. Those who have no dentist and who cannot afford to pay for good dental work are informed of the clinics of the dental schools and the privileges they offer.

Much time and painstaking care were given to the preparation of the leaflet. It was submitted to the frankest and severest of critics. Dr. William H. Potter submitted it to the Academy of Dental Science and to the faculty of the Harvard Dental School. It was submitted to the Tufts Dental School. The Academy and both of the Dental Schools gave it their official endorsement. It also received the approval of Dr. Samuel H. Durgin, chairman of the Board of Health, and Mr. James J. Storrow, chairman of the Boston School Board, and of Superintendent Brooks. So far as was possible, every point of view was obtained, the desire being to distribute a leaflet which would be readable, concise and meaty; one which could not be misunderstood, which would bite into the memory, and its instructions such that everybody, child and grown-up, in any station in life could put them in practice. The short talks on the care of the teeth and what good teeth mean were given the gymnasium classes by the instructors, at the beginning of the class work. They were talks of only a few minutes, and in the vernacular, and were made to appeal to the everyday, practical common sense of the men and women; and the children listened with the closest attention to these talks. Then came the class work and a right good time. This year the same kind of work is continued; and it is broadened by requiring of every child that comes into the gymnasiums an examination of the teeth and mouth as well as of the body. And the leaflets are distributed in all the public baths. In the city of Boston there are 23 public baths, 7 of them being open all the year round.

Immediately an active interest in this movement was shown by institutions and organizations outside and beyond the Bath Department. The South End House, Denison House, the Children's Friend Society and the Boston Dispensary asked for the privilege to distribute the leaflets, and to lend their hearty assistance in bringing the benefits of this crusade within the reach of a wider public. At the spring exhibition of the winter's work at the South Bay Union — under the direction of the South End House — was included a popular demonstration of the process of decay of the teeth. This demonstration was arranged by Mrs. Ellen H. Richards, of the Massachusetts Institute of Technology. The Civic Service House and the North End Union allied themselves to this movement. The Boston Association for the Relief and Control of Tuberculosis asked the Bath Trustees for a large number of the leaflets for dis-

tribution. In his letter the secretary of the Tuberculosis Association says :

"The well-defined and frequent connection between carious or defective teeth and tuberculosis of the throat and glands, as well as the concern we feel for general hygiene of the patients, have led to the making of a careful examination of the throat of each applicant for admission to the Day Camp of Consumptives, by a specialist. The more obvious ills of the teeth may be determined in this way and the patient instructed to see a private dental practitioner or to go to one of the public clinics. Subsequent examination reveals to our physician the result of this instruction. A patient who could not be persuaded to profit by such advice would be discredited and probably excluded from the camp.

"After a recent visit to Rutland Sanitarium where I saw how each patient is required to have a good tooth brush and to use it three times a day I became convinced that we should use the opportunity we have at our Camp Sanitarium to teach the value and delight of this habit.

"Accordingly, a copy of the tract on 'The Care of the Teeth,' prepared under the direction of the Bath Trustees of this city, has been furnished each one of our patients and will be given each new one admitted. The patients will be directed to the clinics of the dental colleges, and one or more of the weekly addresses to the assembled group will be upon Care of the Teeth as a Factor in Prevention and Care of Tuberculosis."

The Boston Tuberculosis Association has incorporated in its traveling exhibitions and libraries a dental exhibit, and instructive and educative literature upon the care and use of the teeth. The Bath Trustees received a letter from the local Tuberculosis Association in Holyoke, Mass., asking for a generous number of the leaflets on the care of the teeth. A request for copies of this leaflet has come from the Philadelphia Association for the Protection of Colored Women. "Such a leaflet is something we have been wanting for a long time," says the secretary of that association. The Children's Aid Society, the Children's Mission, the New England Home for Little Wanderers, and the Society for the Prevention of Cruelty to Children have written to the Bath Trustees asking for large numbers of the leaflet for distribution.

Requests for the leaflets have been received from the Boston City Hospital, the Boston Normal School, Filene's, and Dr. Southard, of Wellesley College. Filene's have distributed 600 of the leaflets among their employees.

In June, 1907, the Boston *Transcript* made formal announcement of "A Popular Movement Being Inaugurated for the Better Care of the Teeth," and gave half a column to that announcement. The *Transcript* did this because the secretary of the State Board of Health, Dr. Charles Harrington, assured them that people did not know all about taking care of their teeth; that such a movement was necessary. The Cape Ann *News* printed as an editorial leader the *Transcript's* announcement. To quote Dr. Osler :

"There is not any one single thing more important to the public in the whole range of hygiene than the hygiene of the mouth."

At the annual meeting in June of the Harvard Dental Alumni Association its seal of approval was set upon this movement for the proper care of the teeth; and its council was authorized to give it the active co-operation of the association.

No one knows better than does your profession the evils which come from neglected teeth; and next to dentists, this knowledge comes most frequently to physicians. The teeth are organs of the first importance; they are essential organs of digestion. When they are decayed and lost, growth and nutrition are hindered; they are contributory factors in setting up diseased conditions of the throat, the nose, the ears and the eyes; they cause a disturbance in the nerves; they increase markedly the chances of catching infectious diseases; and decayed teeth and a foul mouth offer a favorable opportunity for the development of tuberculosis. And again to use Dr. Osler: "If I were asked to say whether more physical deterioration was produced by alcohol or by defective teeth, I should unhesitatingly say defective teeth."

In this country there are more than 20,000,000 school children, one fifth of the entire population, and hardly a child among them but has defective teeth. And among the other four fifths there is scarcely a man or woman who has never had need to employ a dentist. Everywhere throughout the civilized world the same condition obtains.

Stating the same facts differently it can be said, and truthfully, that nearly every man, woman and child has defective teeth; and by that token the name, the People's Disease, has been given to the condition known as carious or decayed teeth. It is a disease of civilization; and how to check the havoc it is working upon human kind is one of the serious problems of the day.

The mouth and teeth are important parts of the human body. Everything that enters the body has but one way to get in; the only entrance is through the mouth. Through it enter the air, food, and the germs of disease, and the good or evil they work depends upon the condition of the mouth and the teeth. Only when the teeth are sound and healthy, and each tooth in its place and in working condition, is the first and most important part of the function of digestion rightly performed.

The teeth are not merely for ornament. Their chief use is to prepare the food for the stomach — to grind the food and mix it thoroughly with the saliva. Food which is not thoroughly chewed cannot nourish the body; it causes indigestion and constipation. It is not what we eat that nourishes us, it is what we make our own, what we assimilate, and when the food is slowly and thoroughly chewed, less of it is needed to meet the demands of the body and its functions, and the simpler, less expensive kinds of foods, and the most healthful, satisfy the appetite.

"Healthy teeth, healthy stomach, healthy body," says an eminent German physician; and

with these come good general health. With poor teeth and poor digestion come faulty nutrition and retarded development.

At no period of life is there greater need of a clean mouth, sound and healthy teeth, and perfect nutrition than during the years of childhood. The child is growing, and natural growth and development cannot proceed unless there is perfect nutrition; and perfect nutrition cannot take place unless the teeth do their work, — and it is an important work. Upon them depends both physical and mental progress.

Therefore, the child's first teeth, the milk teeth, should not be neglected; they are of quite as much if not more importance than the permanent teeth. They are important organs of nutrition, when nutrition is most needed. The utmost care should be taken to keep them from decaying.

In the sixth year come the first permanent molars; and when the child is twelve years old he should have twenty-eight teeth, — the twenty milk, and eight permanent teeth.

The six-year molars are of more importance than the permanent front teeth, or incisors, because they are the foundation stones of the dental arches; they determine the future shape of the jaws; their neglect causes serious irregularity of other permanent teeth. And they are the grinders of which the growing child stands in the highest need. Besides, they are permanent teeth. They are intended to last the entire lifetime, and when they are allowed to rot away no new ones take their place.

The earlier the child acquires the habit of keeping the teeth and mouth clean, the more certain the reward of growing up into a strong, healthy and wholesome man or woman.

Beginning at the sixth year, the teeth should receive the closest attention. Twice each year, at least, they should be carefully inspected by a good dentist; and if any trouble appears it should be promptly attended to — and before the child begins to complain of any pain. If the teeth are not properly attended to between the sixth and twelfth years of age, they decay very rapidly. Neglect of the teeth in these early years works evil, and in many ways.

In each of the three crises in the life of the child — birth, teething and puberty — new structures develop. structures and organs demanded for complete life. At the adolescent period it is of the first importance that eating habits should receive particular attention; it is an extreme hygienic necessity that the teeth be given closest attention so that no fault in them may interfere with the proper growth and development of the maturing boy or girl. Youth should have no hindrance against coming into full and healthful maturity.

At the very dawn of puberty there is a marked change in the amount of food required; there is a new relation to food. The proportion of solid food desired and needed increases. The jaws grow stronger and the muscles of mastication develop. There is a propensity to chew and eat substances that require good teeth. Animal food is usually

more in demand; and a well-balanced dietary is especially needed when the range of appetite normally enlarges.

In adolescence the propensity for sweets and mild acids is greatly increased; therefore, the greater need to prevent acid fermentation in the mouth. If the products of decomposition are not removed they become a poison; and as the bi-products of decay accumulate and as the chip pile of dead matter increases there is progressive liability to infection by micro-organisms.

Bad eating habits in quality, in quantity, or in manner are important factors in nervous breakdowns in childhood, youth, and in the adult. Bad eating habits are one of the causes of the alcohol habit.

The tendency to bolt food unchewed is not always due to impetuosity of appetite or poor table manners. It may be due to poor teeth.

Taste is the doorkeeper at the entrance of the alimentary canal. All the higher metabolism depends upon keeping the appetite true to the needs of the body. In a mouth that is filthy from neglect and tooth-rot there can be no reliable doorkeeper.

The age of second dentition is most susceptible to the nervous disorder of stuttering. Everybody knows how essential good and regularly ordered teeth are to a good speaking and singing voice.

Naturally, the child eats deliberately and thoroughly chews each mouthful before it is swallowed — the proper way to eat. But when the teeth are so decayed that he cannot chew without it hurting him, he speedily falls into the habit of washing the food down with a gulp of water, or tea as it is too frequently the case; and the child becomes a bolter. He wants to be in the select group of chewers, but his aching, neglected teeth will not allow it. The result is that the food which he washes down into his stomach in large, unbroken masses, fails to nourish him; and both the physical and mental development is upset and retarded. Besides, the child suffers from indigestion, which even in children is a grievous evil.

Neglected teeth cause toothache, and when a tooth begins to ache good and hard, the child is dragged to a dentist (not the best introduction to a friend who can do him so much good) and the offending tooth is pulled; and more often than not the child leaves at the dentist's office one of his permanent teeth, a six-year molar, and its place will never be taken. As most of us know, there is no pain harder to endure than a jumping toothache; and the sleepless nights, the irritability, and the nervous, excitable condition caused by such pain does not do a growing child any good. It interferes with the proper performance of his school-work. All of which the child can and should be spared.

A foul mouth and decaying teeth add to the chances of catching infectious diseases. The decomposing food which sticks to the teeth and lodges all along the edge of the gums, between the teeth, and in the crevices of the grinding surfaces, causes the teeth to decay; and this in turn causes the lining of the mouth to become irritated

until it loses its power of resisting the attacks of the disease germs. In a clean mouth, the healthy tissue destroys many of the weaker germs, but in a foul and uncared-for mouth the germs find favorable lodgement, and grow and develop; and the vitality being lowered, the diminished resistance finally yields, and a more or less serious sickness establishes itself. There is every reason to believe that if the practice of thoroughly cleaning the teeth after breakfast was universally observed by school children, if they had the habit of keeping their mouths clean and wholesome, epidemics of infectious diseases would happen less often and be of a less serious nature.

The presence of bacteria within or upon the human body, the transmission of disease germs from the sick to the well, is but one of the factors which tend to cause disease. A lowering of the bodily resistance is the first step. Disease finds its opportunity when the power of resistance is diminished. The healthy body has the power to resist disease; but a body cannot be healthy with a foul and neglected mouth.

In diphtheria the bacteria rarely enter the body; they grow in grayish-white masses upon the moist surface of the mouth and throat; and a bad condition of the throat, the nose and the ears is made worse by decayed teeth. A clean mouth is a protection against pneumonia; the germ of that disease is a weak germ which cannot work its evil unless the resistance to it is diminished by a lowered vitality of the lining of the mouth.

Well cared-for teeth and a clean mouth help prevent tuberculosis. Daily we may inhale germs of tuberculosis, but we do not fall under the ban of the disease unless our resistance is lowered. Tuberculosis is curable, it is recoverable. It is never cured by the physician, but by the patient himself; that is to say, by the natural powers of recovery. These, however, may be, and usually need to be, stimulated, assisted and directed by wise medical guidance. Under favorable surroundings at least three fourths of those affected with pulmonary tuberculosis should recover. In the physician's management of consumptives, of persons affected with pulmonary tuberculosis, drugs play a useful but a secondary part. The principal means of treatment for the relief or recovery of these patients are included under the general term of hygienic measures which are, life in the open air, with abundance of sunlight; properly selected diet; and sound teeth and a clean mouth. These bring about a physiologic reinforcement of the patient's recuperative energy, and this conquers the disease. The hygienic management of tuberculosis is now getting proper recognition.

It is not uncommon to find an inflamed condition of the eye which has been caused by neglected teeth; and certain inflammations of the eye, if neglected, result in loss of sight. So close is the connection between the eyes and bad teeth that doctors recognize the necessity of examining the teeth when looking for the cause of certain inflammatory diseases of the eye.

Says Professor Ewald of Berlin: "In the

etiology of chronic gastritis there are two important factors — the care of the teeth and slow eating." Bolted, half-chewed food, we are told by Professor Cannon, of the Harvard Medical School, causes cancer of the stomach.

"For every child a tooth," says an old proverb. There is no sacrifice which a mother will not make, and gladly, too, for her child, but she need not sacrifice her teeth. Painsstaking care to prevent the increased acid secretion in the mouth from eating into the teeth will save her much needless suffering. In sickness too great care cannot be taken to keep the patient's mouth clean and sweet. Nothing brings greater comfort to the sick person than such care, and it is an essential part of the treatment of every disease.

From a practical view point a few minutes devoted to the care of the teeth every day saves money. Parents who allow a child to grow up with a mouth filthy with tooth-rot and neglected teeth, with a mouth that presents the appearance of a burnt district, fail in their first duty to the child; they have denied him a precious inheritance — good health. "Mine son, he don't work mit his teeth," a Dutch woman said to a health officer who refused to give the boy a certificate of health because of the unwholesome condition of his teeth and mouth. To be sure he does not, but before her boy would be allowed to serve the United States Government, in the army, in the navy, or in the postal service, or before he could qualify as a policeman, or a fireman in any sizeable city (not a bad job any one of them), he would have to spend many dollars and much time in having his teeth and mouth cleaned up. No matter how excellent his qualifications in every other particular might be, he would be held up until that was done.

White, even teeth add greatly to the attractiveness of any face, and not infrequently they are a feature which carries with it a reassurance of neatness and honesty — which are excellent business recommendations. Recently a young woman was refused a desirable position in a progressive department store because she had bad teeth; in every other respect she was well qualified for the place.

There should be thirty-two permanent teeth. They should last until the end of life; their work does not end until then, but altogether too frequently their value is not fully appreciated until it is too late — until there are no teeth for chewing the food.

Money will buy artificial teeth, a full set of them, but though they may be good to look at, generally they are of but small use as organs of digestion; they are of but little help to an over-worked stomach. To keep them clean and wholesome requires more care and time than do the natural teeth. As grinders they fail signally; the crushing power of sound natural teeth is 275 pounds, while that of the most skillfully made artificial teeth is only 25 pounds. So at best artificial teeth are but makeshifts.

In childhood should be formed the habit of caring for the teeth. The child should be taught and

encouraged to keep the mouth as clean as the face, and the habit should become as nearly as possible an instinct. In the home the foundation of the habit is to be laid. And parents should have a broad enough background of knowledge concerning the teeth to furnish the child with a motive, to give him a good and sufficient reason why he should spend five minutes every day upon what seems to him to be unnecessary. Mere words and nagging are ineffective. Even to teach a small thing one must have large resources.

The public and private schools have a clear duty to perform for their pupils in encouraging the better care of the teeth. Theirs is the opportunity to emphasize the full meaning of neglected teeth and unclean mouths, to help parents fix the habit in the children of giving their teeth the proper care. Here and there the work of caring for school children's teeth has been undertaken in a tentative way. Wherever an examination has been made into the condition of the teeth of the school children there has been found a most deplorable state of affairs, and an absolute lack of any appreciation of the value of good teeth. Strassburg, in Germany, is the first city to provide school dentists, and to undertake a systematic municipal work for the care of the teeth of the school children. There it was discovered that 97.5% of the school children had diseased teeth.

Brookline, at the beginning of this school year, undertakes a similar kind of work under the direction of the school committee.

The Massachusetts Board of Education has issued a pamphlet on medical inspection, and in that pamphlet is a chapter on the teeth. United and earnest effort on the part of the dental societies, augmented by the individual endeavor of the dentists themselves, should bring about a very general adoption of dental inspection in the schools. It would mean the widest possible practice of the excellent suggestions made by the committee of dentists who prepared the chapter in the state pamphlet. The co-operation of dentists and medical men is needed.

The dental profession could do no greater service to humanity than to take an active interest in having dental inspection put into practical operation in the schools. No one can give better information or more assistance in promoting better care of the teeth and educating the public up to asking for dental inspection in the schools than can the dentists themselves.

One of the most effective ways of pointing facts, of convincing people into doing things, is to let them see with their own eyes. Photographs, charts, diagrams, make deep impressions, and these, together with popular literature and printed instructions and information will do more than any other one factor in promoting better care of the teeth. The college and social settlements in Boston and throughout the country stand ready to lend their assistance by providing the opportunity and space for such exhibitions. Mr. Robert A. Woods assures me that social workers everywhere will give their heartiest support to such a movement.

The lay public and the newspapers expressed genuine appreciation of Dr. Samuel A. Hopkins's lecture at the Harvard Medical School last winter. How to take good care of the teeth is a matter of intimate concern to everybody, and the public wants to know how it can be done. Popular lectures by dentists of acknowledged reputation would receive serious attention.

The newspaper in Boston which is most read by the people and which influences most strongly public opinion (it is a matter of serious regret that its influence is not always for the best) is persistently conducting a crusade of its own against neglected teeth. The text is forceful and convincing, and the facts are stated with a vigor and directness which its readers cannot but feel. Country newspapers could do their readers immense good by equally effective articles.

To have the dental profession of Boston, its schools and its organizations, go on record as a working body with the organized movement for checking and controlling tuberculosis would be cause for much pride in the community. The Boston Association for the Control and Relief of Tuberculosis has already opened the way, and they are ready and willing to give and receive co-operation.

There is a large number of worthy and industrious working men and women who cannot take the time to go to dental clinics; who want good work, and who do not know where to find it. It has been suggested that lists of registered, skilled dentists be provided for the benefit of such persons, in order that they may have dental service which is not hurried and indifferent, or worse, and that they may obtain deliberate, painstaking care combined with skillful and intelligent work.

It is a well-known fact that a large number of the dental preparations on the market injure the teeth; that commercialism is the dominant factor in their manufacture and sale. Much harm comes to the unsuspecting and ignorant public through their use. An organized effort on the part of the dental profession to protect the public against such injury is needed quite as much as is the work of the medical profession, to discourage the sale and use of injurious patent medicines. Here are the words of one of your own profession, Dr. George H. Wright:

"Dr. W. D. Miller said there has not been for years any doubt in my mind that most cases of wasting observed in our practice are due to mechanical action, which means, in particular, the action of the tooth brush combined with tooth powder. It must be borne in mind, however, that imperfectly formed enamel and dentine are more susceptible to wasting than perfectly formed structure. Dr. R. R. Andrews has shown from his research in enamel formation that there are faulty enamel bodies as also imperfectly calcified dentine. Wasting is produced, not alone by the abrasive action of powders, but through the agency of acids derived from various sources.

"It is necessary that we should know the contents of some of the abrasives used in the form of tooth powder and pastes. Some of the following

ingredients (in varying amounts) have been found from careful examination by chemical analysis, washing and photomicroscopic study to be the constituents of English, French, German, Chinese, Japanese and American tooth powders and pastes:

"Three grades of pumice from 5% to 15%, charcoal, siliceous, whiting, impure cuttlefishbone, containing grains of sand, talcum, insoluble grits, stannic oxide, cliff chalk, infusorial earth, emery, microscopic marine concretions, pulverized oyster shells, calcium carbonate, sodium chloride, sodium bicarbonate, sodium perborate, and many others of this latter group.

"In the pastes are oily substances, — glycerin, vaseline, honey, orris-root, white sugar, vegetable fibers and indeterminable inorganic and organic substances."

"When we consider the extravagant claims of the manufacturers of tooth powders and pastes, should we, as a profession, stand silently still and permit without a word of protest, the too free use of dangerous and harmful ingredients of the character already noted? Is it not our duty to instruct and educate our individual patients as to what is destructive and what is useful? And for that larger world, the people, who are rising in the ranks, do we not owe to them also something of the advantages and blessings of this later knowledge?"

These seven brief articles of faith are not easy to accomplish; they require work and time. But the time seems ripe to begin this work. It is already begun; and it is ready to be organized and continued. The plan of organization suggested is a logical one. It calls for a compact working council of the organizations that can best conduct this crusade. The dental profession should be the leaders in dental hygiene. You can depend upon the co-operation of all the organizations and institutions which now constitute this movement; and you can bring many more to you to help promote it. It has been suggested that a general conference be called to define and extend the plans for future work. And who could better call such a conference than the Dental Hygiene Council?

A wider knowledge of the hygiene of the mouth and teeth is needed in the home, in the schools — everywhere; it helps promote good health. A clean mouth is as important as a clean body, and cleanliness is the best guard against disease. A crusade for better care of the teeth is a crusade for the relief and control of the People's Disease.

IDIOPATHIC DILATATION OF THE COLON, WITH REPORT OF A CASE IN A MAN OF FIFTY-SIX.

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(From the Medical Clinic, of the Carney Hospital, Dr. Henry A. Christian, Physician-in-chief.)

LITTLE or no mention of the disease, "idiopathic dilatation" of the colon or "giant colon," will be found in our popular textbooks of medicine; but the clinical and post-mortem pictures presented are most interesting. As early