In every case in which the patients were freed from their calculi by medical treatment, cure was absolute and in twenty of them the patient's subsequent history was followed from three to twenty years subsequently. In but a very small number of these—six—was there any recurrence of the trouble. These patients got rid of their recurring-calculi under the same treatment as was employed in the first instance.

In seven of the cases treated medically there was failure to cause the calculus to pass. These patients were operated upon successfully later.

In 87% of the writer's cases thus treated, in which the calculus was small enough to pass through the ureter, it was spontaneously expelled, while the patients were under medical treatment.

SUMMARY OF SURGICAL TREATMENT.		DEATHS.	CURES.
Number of patients operated upon	56		
Nephrolithotomies	36	2	34
Subsequent nephrectomies	2	0	2
Ureterolithotomies	8	0	8
Nephrectomies in cases simulat- ing renal calculus	3	1	1
Nephropexy in same class of case	1	0	1
Freeing ureter of adhesions	2	0	2
Splitting capsule—nephralgia ...	2	0	2
The same for acute congestion...	2	0	2
	56	3	53

Operative mortality for total number is 5.3%

SOME RESULTS OF DISPENSARY WORK IN THE CONTROL OF TUBERCULOSIS.

BY CLEVELAND FLOYD, M.D., BOSTON,

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CLINICAL effort, which often goes by the name of "dispensary work" is rarely called upon to direct its attention to the control of any disease. Its work generally deals with a collection of individuals with many types of illness and requiring as many different methods to obtain relief. In taking a part in controlling tuberculosis, the dispensary may unify its efforts in combating one disease on well drawn lines.

The fact that the sanatorium has been in existence for years has firmly established it in its preëminent role in the treatment of incipient cases. The hospital for the isolation and care of those advanced in the disease, while of more recent growth, is now fully recognized as an essential factor in its suppression.

But with all sanatoria and hospitals, the problem is an individual one, and the underlying causes of the disease can receive but limited attention. The field of the dispensary lies largely between those efforts directed towards the cause of tuberculosis on the one hand, and its isolation on the other, and yet, among all agencies working toward the limitation of this disease, it has perhaps the least fixed position. Tuberculosis must largely, because of its existence in the home, be checked there in its course; the disease while still obscure must be detected, the services

of the sanatorium or hospital obtained, where they are necessary and their work made productive of the greatest amount of good by means of prolonged supervision. If this is conceded to be the part that the dispensary is called upon to fulfill, a test of its efficiency may be obtained by the results that appear in the following direction:—

First, How many cases of tuberculosis have developed among those under clinical supervision during an observation period of several years?

Second, How many cases regarded primarily as negative have, in a period of months, been proven to be positively tuberculous?

Third, How many cases regarded as tuberculous have been followed through the course of the disease until an arrest has been well established or hospital care provided for them until death?

The thoroughness of the work of prevention, the accuracy of diagnosis and provision for those suffering with tuberculosis will thus be clearly shown. How far the dispensary has met these demands has never been fully studied, as far as I am aware.

Any clinic for tuberculosis should periodically put itself through such a test of efficiency in order that its routine may not become worn out and the individual case become lost sight of in the aggregate.

The work of the clinic of the Boston Consumptives' Hospital, which has now been carried on for about five years, has offered an opportunity to gather facts along these lines in Boston and I have made a statistical study of what has been accomplished among such patients as have presented themselves for treatment.

In this as in other clinics for tuberculosis all classes of patients complaining of pulmonary symptoms are received for treatment. Of necessity, therefore, in many instances, must cases of non-pulmonary disease be considered and examined into. There are also many instances of patients who have been exposed to tuberculosis who come for examination. The clinical material consequently at our disposal has consisted largely of three groups of cases:—

- (a) Negative cases.
- (b) Cases of non-pulmonary disease.
- (c) Cases of pulmonary tuberculosis.

The duty of the clinic towards the well or negative case consists first of all of being sure that there is no question of health, and second, that the symptoms of the patient, or the surroundings that have given rise to suspicion, are improved. Too little thought is given to the healthy as they pass through the routine of examination, for it is just as important that they remain well as that others that are sick should be provided for. Often on account of conditions that threaten health a negative case will have to be continued under observation for a considerable period of time and this may run into years before all that should be done is accom-

plished. No tuberculosis dispensary is well balanced in the scope of its work unless at least one-third of the patients it reaches out for are proven to be negative cases.

The cases of non-pulmonary disease require little more than to be referred to a general medical clinic. In regard to the cases of pulmonary tuberculosis the dispensary has as its duty to make an accurate diagnosis, settle upon a suitable disposition in every case and provide supervision in every instance as long as it is required.

All the efforts of a clinic, no matter whether its work is general or specialized are to some degree negated through the mass of clinical material that presents itself and the failure of the individual patient to sufficiently co-operate. It is not uncommon for a patient coming in for examination to give a fictitious name and address, in order that he may never be traced. Frequently a patient will change his address as often as once a month, or even a week, and in spite of all efforts he is soon lost track of. Many patients who have once reported for examination on account of pulmonary symptoms, and have been somewhat relieved by treatment will resent all later attempts at further inquiry into the state of their health.

The lack of exactness in the diagnosis of diseases of the chest, giving rise as it does to a confusion of opinion among physicians too frequently offers a loophole of escape to the patient from his worst fears, and often the truth as to his condition is never brought home to him and the value of the clinic in the case comes to an abrupt end.

The ready assurance which the arrested case of tuberculosis has in himself, feeling as he does that further trouble after leaving a sanatorium is impossible for him, is the cause of many relapses and the disappearance of many patients from the roll of the clinic.

The constant movement of patients to the surrounding towns and cities of Boston, especially our foreign born people who do not take kindly to institutional treatment, adds to the ineffectiveness of this type of work.

In any estimate of the results accomplished through a dispensary these difficulties must be considered. They will vary much in the extent to which they are an embarrassment in different sections of the country, and will depend to a considerable degree upon the support accorded by allied hospital and health departments. But even when co-operation has reached a high grade they will still be present.

Statistics to be of value must be based upon sufficiently large numbers to give a fair average and to afford anything like accurate conclusions. For this reason the results obtained in the first five thousand patients examined at our clinic beginning September, 1907, and continuing into the middle of the year 1909 have been made available. Since this latter date three years of observation and disposal of the patients have

elapsed. While I fully realize that in some instances where the statement of the patient has had to be taken as to his condition, inaccuracies will creep in, nevertheless, I believe the figures obtained are sufficiently reliable to be of value.

Among some five thousand patients there were found to be as the result of their first examination, 2121 positive cases of phthisis, 1130 who were suspected of having the disease, and 1707 who were negative. Of the remaining 42 we have insufficient data. Of this total number 1315 were lost to the clinic through their giving an incorrect address, or through their moving away. They were divided as follows: 575 were considered negative when lost to the clinic, 382 were suspected cases and 358 had definite pulmonary tuberculosis.

In other words, about one-sixth of the positive cases were lost sight of during a period of observation varying according to the individual case from two to four years. It is only natural to expect that the group of negative cases lost should be by far the largest one, as in almost any clinic it is the custom to give less attention to this group than to those demanding active supervision. The group of suspected cases, as a result of continued study, gradually separates itself into positive and negative; generally the larger proportion being grouped with the latter. The apparent good health enjoyed by most of this class makes for little interest in a tuberculosis clinic, and once through the routine they frequently disappear or cannot be driven to return for further examination. Among 358 cases of phthisis who were lost from observation, 247 cases were never found upon home visitation and never subsequently reported at the clinic after the first clinical examination. In other words, these are the tuberculosis "carriers"; the indiscriminate spreaders of the disease. The man who suspects that he has phthisis and yet desires to hide it at the expense of the public will in all probability be increasingly in evidence as the supervision of cases through the local Board of Health becomes more efficient.

Whether the time will ever come when it will be necessary to establish observation wards in connection with our institutions for tuberculosis in order to detain such patients as seem likely to drift into this class will remain for the present an unsettled question.

That large group of cases which are constantly moving from place to place and thereby spreading infection with them, can be greatly decreased by immediate and close observation in their homes in order that their future movements may be determined, or by an ordinance preventing their removal till approved by the Board of Health. For those patients who move without the city limits and consequently escape the jurisdiction of the Health Board, either State supervision or a metropolitan plan of co-operation among tuberculosis clinics will in either case meet this need.

By these measures the floater and drifter having active tuberculosis in the community can be much more readily controlled and the work of the dispensary made productive of greater usefulness at one of its weakest points. There is a definite class of people seeking treatment in a dispensary that demand prompt measures if the end we seek for them is to be accomplished. Delay in giving relief or in providing hospital treatment quickly ends the usefulness of the clinic through dissatisfaction over what they think should be accomplished for them. Until this is more fully appreciated by those in charge of institutions caring for the consumptive a fairly large percentage of positive cases will continue to be placed among those lost sight of.

While the total number of cases who have been lost to the clinic appears large, making as it does about one-fifth of the number investigated, we must not forget that in any large city, with a rapidly shifting population, this will occur, and it is much more in evidence in larger cities like New York and Chicago than it is in Boston. With the firm establishment of a dispensary in any community through its securing a hold upon its patients there must in time be a marked reduction in the number of its cases who drop out of sight.

It occasionally happens that patients who have been found free from pulmonary disease on their first examination and of whom we have had no knowledge for some years, drift back to the clinic showing active tuberculosis. Responsibility for this condition most frequently lies with the individual. Nevertheless, if each person going through the routine of the clinic has the dangers of tuberculosis sufficiently impressed upon him, as well as the importance of proper living, this will rarely occur.

In nearly every instance where one of our patients has reported for examination there have been symptoms that gave concern as to the condition of the lungs or exposure to tuberculosis has taken place. On account of these facts, therefore, the aftermath of our negative cases is of some importance; 1707 such are included in our first five thousand. Of these, 604 have recently been examined and found well; 520 have reported themselves to be well or suffering from complaints other than tuberculosis. Of the remaining 635, 575 are included in the group of lost cases, and only 24 have developed pulmonary tuberculosis, or less than one per cent.

Fully two-thirds of these cases have been exposed to phthisis and these figures speak for the power of isolation and observation in checking this disease.

But the tests of how efficient a tuberculosis clinic and its work in the home may be, is also strikingly shown by the demonstration of how many cases which have been suspected of having the disease have subsequently developed it while under observation for a period of years. The large number of patients suffering from over

work, anemia, debility and bronchitis are always open to the possibility of having tuberculosis. Furthermore, slight chest deformities and poor lung expansion frequently give rise to just enough signs to demand constant observation; 1130 patients presenting just such questionable evidence of phthisis were among our first five thousand cases. Of these 382 have disappeared and all trace of them has been lost, 748 have been successfully followed and 62 cases have developed phthisis. This number also includes those whose condition rapidly changed after their first examination and who were in a short time proven tuberculous.

One of the chief difficulties in any large clinic for tuberculosis is the trouble which arises in surely making the diagnosis of incipient phthisis from slight signs. This most frequently occurs in children, and unless every means of diagnosis is at hand many cases drift away, to the dissatisfaction of physicians and patient. To distinguish between physiological differences at the right apex and early tuberculosis is no easy matter. I have been much interested in following these cases of questionable right apical signs, who are often classed as questionable cases to see if in a relatively short space of time tuberculosis developed. Among a total of 1130 cases suspected of pulmonary tuberculosis, 624, or a little more than 50%, gave signs at the apex of the right lung. The others are almost equally divided between having questionable signs at the left apex and base. Almost without exception, in these cases there has been a disappearance of these signs, or where they have persisted, active tuberculosis has failed to develop. Where the right apex has shown questionable involvement, 62 of the number of cases that we have been able to trace have developed phthisis. It would seem from our observations in this series of patients that the lack of pulmonary lung expansion and chest development, together with the not infrequent condition of an old inactive apical process most commonly give rise to these signs.

In our work as carried on in the various districts of Boston, it has been our policy to examine families as complete units where tuberculosis had gained a foothold. The result of this effort has fully justified itself. Included in this series of cases there was a total of 1563 children. Of these 302 were found to have pulmonary tuberculosis, or about 20% of the total number, 386 were suspected of having the disease and 875 were negative cases. A history of exposure was obtained in 684 instances, the father being the focus of contagion in 464 cases and the mother in 278 cases. Only a very few cases occurred where both parents were found to be suffering with the disease.

In a study made some time previously in regard to the morbidity of tuberculosis in children as the result of family infection pulmonary signs were found in between thirty and forty

per cent. of the cases. In the present work, while only two-fifths of the total number of children came in close contact with the disease in the home yet twenty per cent. showed signs of phthisis.

About 1000 of these children came from families in which there were more than four children. This alone gives an idea of the opportunity for the propagation of the disease from direct contact.

As regards the outcome of these cases after a period of observation of sufficient length of time to be of some value in the determination of the immediate prognosis, only 40 cases of phthisis have developed where it was not detected on the first examination. These are included in the foregoing number of developed cases. The great majority of positive cases have been completely arrested and these children are for the most part attending school. It is evident, I think, that the work of prevention among children is one of great promise. The Preventorium has a large place in every community. The need in Boston is pressing if we are to obtain control of tuberculosis in the near future.

In order that the increasing good which is manifested by the isolation of cases suffering with phthisis may be realized to its fullest extent it is the ideal of every institution for tuberculosis to provide such isolation for every case within its wards as long as they are a danger to the community. As yet this is far from possible, both on account of the still inadequate number of beds, and also because of the refusal of many patients of the opportunity for hospital treatment when it is presented. It is important, however, to know as far as possible whether in the instances where death has occurred it was in an institution or not. My statistics show that among 600 cases a little less than 50% died in a hospital; the remainder were cared for by nurses in the homes of the patients. In almost this entire group, however, hospital treatment for varying periods of time during the illness occurred. Local sentiment and local conditions, depending largely upon the proximity of the hospital and its reputation among the sick will naturally make this state of affairs a variable one.

The more closely the hospital organization is in touch with its patients, socially as well as medically, the easier the solution of this difficulty will be. Where it is the policy, as in Boston, to utilize to the fullest possible extent existing sanatoria and hospitals in caring for patients and not to encourage treatment at home, the value of institutional care cannot but be realized in the community and the opportunities thus offered more completely utilized.

If the statistics here given demonstrated anything they would seem to show that a dispensary has a well defined and valuable place in the control of pulmonary tuberculosis. Its work cannot be measured in the terms of "cases cured" as can that of the sanatorium, but its usefulness

will be almost entirely along the lines of diagnosis, isolation and prevention. The conclusion would seem justified, that in the absence of any specific remedy for pulmonary tuberculosis, its suppression will be brought about by multiplication of those agencies at present working against it. Neither the sanatorium, the hospital, or the dispensary alone can make much headway, but working together as one unit they must in time fully justify their existence.

THE SACRIFICE TO ASKLEPIOS: A MIME OF HERONDAS.

BY ROBERT M. GREEN, A.B., M.D.

UPWARDS of some twenty years ago there was discovered at the British Museum, among a collection brought from the catacombs of Fayoum, beyond the pyramids, a mutilated Greek papyrus containing a fairly complete text of seven of the mimes of Herondas, with fragments of four others. This Herondas was an Alexandrine poet, thitherto known only from a few of his verses preserved by Stobaeus: Athenaeus quoted him twice; the lexicographer Zenobius mentioned him; and the younger Pliny, in a letter to Antoninus, praising the epigrams and iambs of his correspondent, declared them worthy of Herondas. The discovery in the British Museum served to establish the half conjectural poet in the ranks of literature as a younger contemporary of Theocritus, the greatest of the bucolics. He lived in the time of the early Ptolemies, under the reign of Philadelphus (Ptolemy II) and Euergetes. Some verses from the first mime, "The Pander," permit us to fix the date of the full development of his talent between 250 and 240 B. C.

The papyrus itself is in uncial chirography from the second or third Christian century. The text, though presenting some errors and lacunae, is on the whole in a satisfactory state of preservation. This priceless and unique document was first transcribed and edited by Kenyon in 1891. Another recension by Rutherford followed in the same year. Continental editions by Van Herwerden, Bücheler and Crusius were published in 1892. Reinach and Weil published French editions; Girard studied the relations of Herondas to Theocritus; Boisacq issued a French translation and critique. In Germany, Diels investigated the relations of Herondas with Alexandrine art. Among the Italians, Bonghi and Piccolomini published studies and essays in 1892; and in 1893 Setti made the first Italian translation of Herondas.

The mimes which were thus restored to the world from the original manuscript may be described as dramatic idyls,—brief sketches or scenes, with dialogue in iambic trimeter, half comic, half satirical, on topics drawn from the current life of the times. It is this which gives them their chief value, for they preserve at first