

work to detect such lesions, and this is why so many clinical workers, who have had the sense of touch educated and developed through many years of practice, feel that their manual examination is more valuable than what they learn by the eye in attempting to read the plates.

This, of course, will be obviated in the future, when the sense of sight has been educated as much as the sense of touch has. When this has taken place there is not much doubt that the eye will prove to be superior to the hand.

Again, we are at present very much handicapped in a diagnosis by means of the ray by the fact that while we have learned to feel what is normal in examining a patient, we have not yet learned to recognize the normal living anatomy at different stages of development. Thus what would be normal in a joint of a young infant would be abnormal in that of an older child. Our study must be, therefore, to thoroughly educate our eyes in regard to normal living anatomy at all stages of development, and we shall then be in a position to make a much more exact diagnosis with the aid of the Röntgen ray. Until this is done, we are working comparatively in the dark, for we believe that both medical and surgical diagnoses in the future are to be wonderfully aided by means of the ray.

Another point which we should consider is this: it is not only wise, but almost necessary, until we are absolutely sure that we know the normal anatomy at different stages thoroughly, that we should, when examining a joint or shaft, have in our picture a corresponding joint or shaft of the same individual. Until our eye is better educated and our knowledge much greater, it is only in this way, by comparison with the other side, that we shall know whether such joint or shaft is diseased. Witness the slight degree of atrophy in the cortex of the bone which we might well read to be normal unless we had a bone on the opposite side to compare with it. This comparison in the use of the x-ray is just as important as we have for so many years found in the percussion of the lungs: comparing the resonance of the healthy side with that of the supposed diseased side.

Of course, in the very early stages of epiphysitis we cannot at present make a diagnosis by the ray, since such changes have not advanced far enough for the eye to detect them, but surely in these very cases touch would not detect, and in my experience on thoracic cases, the x-ray has many times shown what had antedated my clinical examination.

It is important to remember in all cases that owing to the anatomical peculiarity of the insertion of the joint capsule in different bones, the hip and shoulder joints are more likely to contain pus, in cases of suppurative separation of the epiphyses, than are the wrist and knee.

THE French Congress of Practitioners declared its approval of the plan to charge double rates for professional calls made on Sunday. — *Jour. Am. Med. Asso.*

AN OUTBREAK OF DIPHTHERIA DUE TO INFECTED MILK.

BY CHARLES HARRINGTON, M.D.,

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ON April 13, after a period of comparative freedom from diphtheria, there were reported to the Board of Health of the town of Milton eleven cases of that disease. This sudden explosion caused, very naturally, a feeling of grave apprehension on the part of the local health authorities, who made immediate application to the State Board of Health for assistance in determining its origin. On the following day, another case was reported. Investigation showed that all of the cases reported on April 13, and single cases reported on April 12 and 14, had this in common: that the families of the victims were supplied, without exception, by the same dealer in milk, whose route lies partly in Milton and partly in Dorchester. Inquiry at the office of the Board of Health of the city of Boston developed the fact that on April 12, there were reported from Dorchester six cases; on April 13, nineteen cases, and on April 14, eleven cases of the disease, all in families supplied by this same dealer, whom we will designate as "A." Inquiry into the sources of his supply developed the fact that it was derived from six producers, as follows:

J. H., Randolph: 10 cans, some of which were bought of other producers; all delivered to "A." No diphtheria on the premises of J. H., or on those of the others who contributed to his supply.

R. B. N., Randolph: 4 cans, all sold to "A." No diphtheria.

E. T. T., Randolph: 3 cans, some sold at retail and the rest to "A." No diphtheria on his premises or among his customers.

O. H., Milton: 7 cans, all sold to "A." No diphtheria.

J. M. B., Milton: 4 or 5 quarts, all sold to "A." No diphtheria.

C. F. J., Milton: 27 cans, 17 sold to "A" and 10 to a dealer in Hyde Park, whom we will designate as "B."

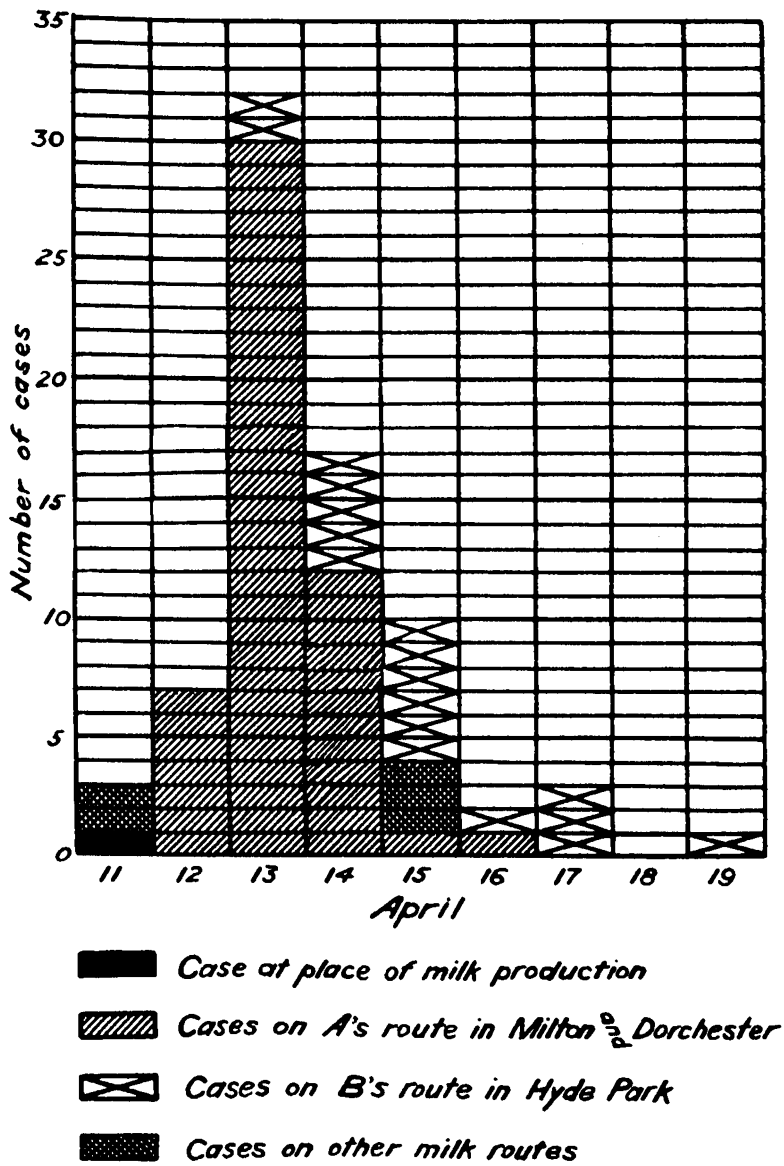
Inquiry as to the existence of diphtheria on the premises of C. F. J. revealed the fact that his grandchild was seized with the disease on April 11; that the cooler in which the milk was mixed was washed in the house; and that this office was performed by the person who had the care of the sick child.

It appeared probable that herein lay the solution of the problem, but the absence of any reported outbreak in Hyde Park offered an obvious complication, since more than one third of C. F. J.'s output was delivered to families in that town by dealer "B." On April 14, however, four cases; on April 15, five cases; on April 16, one case; on April 17, three cases, and on April 19, one case, or fourteen in all, were reported to the Board of Health of Hyde Park, all of which and two that had been reported on April 13, without exciting comment, proved to be in families supplied by "B."

Prompt action on the part of the local authorities of Milton in excluding from sale the milk of C. F. J. brought the outbreak to an immediate close. The incidence of the cases is shown by the accompanying diagram. It will be noted that in the three places concerned there occurred, between April 11 and 19, five cases among families

inclusive, in the three places mentioned, 72 cases of the disease, all but three of which occurred in families supplied by two dealers, who obtained their milk from a man in whose household a child was seized on April 11, and the three cases not connected with this supply were secondary to another case reported on the same

*Outbreak of Diphtheria
in
Milton, Dorchester & Hyde Park.*



not supplied by "A" or "B," namely, two on April 11 and three on April 15. One of the former was reported in Dorchester, the other in Milton; and the three cases reported on April 15 were all in the same household with, and secondary to, the latter.

There were, then, between April 12 and 19,

day. The fact that the outbreak in Hyde Park occurred later than that in Dorchester and Milton may perhaps be due to the fact that dealer "B" called for his share of C. F. J.'s milk in the evening and sold it on the following day, while dealer "A" came for his in the morning and disposed of it at once.

It is of further interest that C. F. J. himself came down with the disease after the outbreak had nearly subsided, and that dealer "A's" son, who drank milk from C. F. J., was one of the earliest victims. The partner of dealer "B" was seized on April 18 and at about the same time also another member of his household.

COLD AIR IN INCURABLE CONSUMPTION.

BY HERBERT C. CLAPP, M.D., BOSTON,

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NOT long ago the trustees of the Boston Consumptives' Hospital invited a few physicians to come to one of their meetings prepared to make suggestions as to the planning and construction of their proposed hospital buildings at Mattapan. They announced that they intended to receive cases of the disease in all stages which were not acceptable at the State Sanatorium at Rutland.

In the presentation of views which followed, one or two of the invited guests expressed the opinion that, as regards exposure to fresh air during the different seasons of the year, all cases of consumption should be treated *exactly alike*,—the far-advanced as well as the incipient, and all the grades between.

As I could not entirely agree with this doctrine, I tried to express my dissent, but fear that on the spur of the moment I did not say exactly what I meant. I now desire to put into writing the opinions which I can in this way express more clearly than in hasty extemporaneous speech.

Having seen in many hundreds of curable cases of pulmonary tuberculosis in New England the really wonderful effects of constant exposure to large amounts of fresh air, especially in the winter time, no one could be more enthusiastic than I in recommending for such cases this treatment in all its thoroughness.

Unfortunately, however, if the disease has passed beyond a certain stage, this method, either alone or combined with any other therapeutic measures whatsoever, completely fails in inducing recovery in the vast majority of cases, although in them a temporary improvement may sometimes follow.

It is, of course, impossible for the best physician always to state with absolute infallibility just exactly what patients are incurable; but practically every fair-minded man of experience will admit that there are a great many cases which come to the physician which he can decide to be thus incurable with every prospect of having time prove his decision to be correct in all but exceedingly few instances.

Now, admitting this, shall we give to such consumptives as these as much cold air as we would give to incipients? I should say that sometimes we should and sometimes we should not. Of course, I presuppose that nowadays everybody would advocate what is generally called "good ventilation" even in the worst of these cases, the windows being open more or less and the

room being heated; but this is not the modern fresh air treatment.

For our present purpose we can divide incurable cases into four classes: First, those who really enjoy the cold air; second, those who dread it and really suffer from it; third, those who dread it and suffer from it but think they ought to submit themselves to it; and fourth, those who are indifferent.

As to the *first* class, those who have been properly trained in sanatoria or in private practice as a rule gradually learn to love the fresh air so much that they cannot get along without it and are not happy unless they have it. By all means let them continue to have it.

In the *second* class are generally those who first come to us in the incurable stage and who have not hitherto had the fresh air treatment. Many of them, perhaps from improper habits of thought and living, dread the cold air and suffer severely if compelled to endure it, and beg to be allowed to be comfortably warm. Repeated trials in actual life prove that they never do get used to the cold. They should not be compelled to endure it against their wills.

The *third* class of incurables comprises much the same kind of people except that they have more will power and perhaps more endurance. They are not willing to admit their incurability. They know from the common talk that fresh air is a powerful factor in the cure of consumption; and with the heroism characteristic of old martyrs they make a stern resolve to submit themselves to it at whatever cost of comfort. In like manner, to increase their chances of getting to heaven, some of the old enthusiasts of a former generation, deeply imbued with the religious ideas of their times, and especially apprehending the beauty of self-sacrifice, voluntarily walked with pebbles in their shoes or inflicted on themselves some other unnecessary tortures. They were willing to inconvenience themselves for the object to be gained. If they had lived in these times, perhaps some of us might have tried to persuade them that such self-abnegation as that, and such useless sufferings did not materially increase their chances. So with these hopeless consumptives, it is pitiful to see them voluntarily incurring discomfort without receiving any adequate return. To be sure, some of them might breathe a little easier for it, but in most cases their sufferings certainly outweigh any benefits received.

The *fourth* class, the indifferent, we should try to persuade to have abundance of air, if not disagreeable, and sometimes we may succeed and sometimes not. In all cases, however, we should respect their freedom of choice.

In fact, in my opinion, the last point is the key-note to the whole situation with all four classes. If we have good reason to think that they cannot get well, let us be really kind to them by allowing them to choose (perhaps after trying both methods) whether they shall be continuously exposed to the cold fresh air of winter or not.

In order to give them this choice, hospital