such results from the frequent administration of small doses, because one dose will be partially eliminated before the next is given. This is but repeating much of what I have often said about the use of digitalis in heart disease ; in which, as in pneumonia, our object is to enable the heart to cope successfully with work before which it was giving way. But you must remember that in febrile states the heart responds less readily to digitalis, and therefore fuller doses must be given. The effect of each dose should be noted before a second is given. This will require care, and should not be entrusted to any one unable to judge of the character of the pulse.

Unfortunately, in some cases of pneumonia, the heart does not respond to the largest doses of digitalis. I lost one such case a short time ago. Other stimulants must then be depended on.

Ammonia and Sp. Ætheris Co. are useful stimulants when prostration is marked. To get the full benefit of their use, they must be given *frequently*, as their effect passes off quickly.

Alcohol is given very generally. Fagge says that few over forty can get well without it, and that it should be given to bad cases at all ages. It is quite unnecessary in mild cases under middle age, and should not be given to the old, because they are old, but only when indicated by the appearance of prostration. An old woman in Ward 10, who gives her age as 85, has just recovered, you know, from a mild attack, without any stimulants of any kind—she did not require any. Alcohol should, however, be given freely in marked prostration and its effect watched.

All these stimulants act on the system generally; they have no special effect on the heart, and are, therefore, much less effective in counteracting heart failure than digitalis.

If, notwithstanding the administration of such general and cardiac stimulants, cyanosis appears with signs of pulmenary congestion and failure of the right ventricle, the abstraction of six to ten ounces of blood from the arm may give such relief to the laboring right ventricle as to enable it to recover itself, and re-establish an effective circulation.

Much more might be said on this subject were

there time. My object has been to point out to you what I believed the best plan of treating pneumonia, with the reasons therefor. I hope I have made it plain to you why the great object must be to maintain the circulation. By all means avoid giving expectorants in pneumonia as a matter of routine, they injure the stomach without doing any good to the lungs.

## TREATMENT OF NEUROSES.\*

## BY E. C. SEGUIN, M.D.

In the intervals between the paroxysms of migraine, dietetic measures should be used to correct the gouty and lithæmic diathesis.

Few theories are so injurious in their results as the one that migraine is due to indigestion. This theory finds apparent support in the vomiting of food, and of bilious material. This vomiting is a result, not the cause of the migraine. The presence of the sour bilious material is simply due to the prolonged muscular effort of the act of vomiting.

As has been pointed out by Weir Mitchell, and Stevens, many cases of migraine are due to some ocular defect. I have never seen a case of migraine in which there was not ocular defect, either error of refraction or muscular weakness, particularly of the external recti. In this relationship to ocular defect lies the explanation of the influence of heredity, and of the fact that migraine disappears between the ages of 40 and 50, the period when the powers of accommodation fail.

Cannabis indica and atropine should be administered in large doses. The mydriatics act by paralyzing the third nerve, and thus relieving the strain on the ciliary and internal recti muscles. A good reliable extract of cannabis indica, either Hering's or Squibb's, should be used. The same preparation should be used in every case, so as to secure reliability as to the strength of the dose. Cannabis indica gr.  $\frac{1}{6}$ , arsenious acid gr.  $\frac{1}{60}$ , may be given in pill form before meals. This dose should be increased by 1/6 of a grain each week, until the patient does not quite reach the stage of semidrowsiness and dreaminess. In women the maximum dose is from  $\frac{1}{3}$  to  $\frac{1}{2}$  grain. This

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