

found the names of Goodell, Hirst, Battey, Roswell Park, Lusk, Cheever, Charles T. Parkes, Cabot, Hunter, McGuire, Nancrede, Weir, Stimson, and many others of equal note.

Under the heading of "Miscellaneous Operations," the author has given several of very diverse character.

First, are quoted cases of osteo-malacia, cured, after weeks or months of confinement to bed, by either oophorectomy or Cæsarean section.

Passing to another subject, the question of graduated tenotomy of the eye muscles for the relief of severe nervous symptoms is carefully discussed. The author freely acknowledges the value of tenotomies, both complete and graduated, in the restoration of equilibrium in badly balanced ocular muscles; but he is none the less convinced that in numbers of instances of reported cures of chronic chorea, petit mal, and even delusional insanity, the effect of the operation *per se* is in large measure the potent cause of the supposed cure. This belief is founded, not alone on theory, but upon the fact that in certain cases of reflex nervous troubles a cessation of the symptoms has followed the tenotomy, although this has not produced perfect equilibrium. Again, the relapses which may take place after a perfectly successful series of tenotomies would indicate that the nervous phenomena attributed to the insufficiency, for the relief of which the operations were made, were not correctly so attributed, and that the temporary relief must be ascribed to some cause other than the restoration of an imperfect balance of the external ocular muscles.

In seeking for a reasonable explanation of the phenomena observed in the above cases, the author has formulated the conditions which are common in nearly all of them:

1. Anæsthesia.
2. Psychical influence, or so-called mental impression.
3. Relief of tension.
4. Reflex action, or the "reaction of traumatism."

These influences were operative in the majority of cases, although not one of them, except the last, applies to the whole list.

With the idea that it was conceivable that a disease of the nerve centres, not reached by

ordinary drugs, might be affected by agents of such volatility and diffusibility as ether and chloroform, the author instituted a series of observations upon a number of epileptics in various stages of the disease. All other treatment was withdrawn; ether was given to the production of full anæsthesia at intervals of from forty-eight to seventy-two hours. The results were either entirely negative, or, in consequence of the withdrawal of their bromides, the patients grew worse.

Since in the great majority of cases upon which Dr. White bases his paper there were either undoubted symptoms such as are habitually associated with organic disease, or there was demonstrable and unmistakable evidence of such disease, it is necessary to believe, in considering the psychical influence of operation, that powerful impressions acting upon the emotional or intellectual nature may affect the organic processes of secretion, nutrition, etc., and may arrest pathological changes and bring about reparative or recuperative action. Cases are cited in which such influences are clearly set forth.

The author holds that the normal equilibrium which we witness between the cerebro-spinal and the sympathetic systems, as respects their influence upon the blood-vessel, is obviously more or less interfered with when the brain transmits a more than wonted impulse, allowing the unrestrained action or paralyzing the influence of the sympathetic vaso-motor nerve. In this relation the author narrates some remarkable cases of hypnotism, and quotes some striking examples of the effect of the central nervous system upon the body.

Belief is expressed that in many of the cases described there can be little doubt that relief of tension is an important factor in amelioration or cure. If it is assumed that preternatural tension exists in the cranial cavity, this would be relieved to an extent by trephining, and there would be but few exceptions to the rule that in each case something was done which lessened tension in the cavity or organ of the body. A diminution of the tension would manifestly alter the blood supply to any important organ in the body, and with it the nutritive processes, local and general. Beyond this nothing definite can be said, except as it applies to cases of ascites, in