

and the vagina was partly filled with urine. The union appears perfect but feeble, and as she complained much I removed the quills; but left the sutures. A strip of lint in tinct. Benzoin to be applied to the perineum, covered by tepid dressing.

Continue tonic and food. To have whiskey ʒij. daily.

25th.—Removed all the points of suture to-day; union appears to have taken place everywhere; tongue clean, pulse 80, soft; sago in lieu of corn starch; to have 4 or 5 oz. of wine daily.

April 2nd.—Since last report she has greatly improved; all going on well; yesterday menstruation commenced and continues. Bowels have not acted since operation; passes her urine freely; appetite fair; strength better.

To have a soap and water enema to-night, and repeated to-morrow if required; should that not be sufficient, ol. ricini ʒij. to be given Sunday morning.

6th.—On examination to-day, I found the union everywhere firm and strong, and a perfect perineum re-established. General health good; appetite improving; bowels moved on Friday last, since then no action. To have an injection to-night, or if that fails, ol. ricini ʒvi. to-morrow.

11th.—Discontinue the quinine and iron.

R. Quinæ disulph..... gr. i.

Zinci sulph..... gr. ʒ.

Ext. Anthemid..... grs. iij. M.

Ft. pil. three times a day.

Et R. Alumin sulph..... ʒij.

Aq. distil..... Oj. M.

To be used as an injection three times a day.

Bowels require an occasional injection.

22nd.—She has continued to improve since the last report. She can walk without pain or inconvenience, and her general health is restored. The perineum is firm and strong. To leave the hospital when she wishes.

Discharged cured.

CURARE IN TRISMUS AND TETANUS.

Prof. Busch, of Bonn, gives us a record of his experience in the history and treatment of traumatic trismus and tetanus during the Bohemian war of 1812.

The fights in Paris in 1848 brought one thousand

wounded to the hospital, but none were attacked by tetanus. During the Schleswig-Holstein war, 1849, a single case came under the notice of Stromeyer. On the other hand, there were 86 cases during the Italian war of 1859, on the Austrian side, as Demme informs us, and even more—namely, 140—on the Italian side. The expedition to the Crimea occasioned the admission to and treatment of 12,094 wounded in the English hospitals, 19 of whom only suffered from subsequent attacks of tetanus. 363 such cases occurred during the great American war. The per centage of occurrence is largest in hot climates; for instance, Gilbert Blanc states that 30 cases of traumatic trismus and tetanus happened during the West Indian war, when the number of wounded was 810.

Dr. Busch had 21 cases under his observation in his field hospitals. Twelve of them were in the castle of Hradek, where 500 patients were accommodated, 5 in the Lazaretto, of Nechanic, where 600 were confined; 2 in Castle Prim, and 2 in Castle Stracow. Dr. Busch believes that special localities and over-crowding favored the attacks. Almost all the cases were gunshot wounds of the lower extremities; this is partly explained by the timely removal to more distant hospitals of those who had wounds of the upper limbs.

The percentage of recovery is larger in tropical climates—at least Blanc saved 43 per cent; of Demme's cases 7 per cent. recovered; 7.4 was the percentage in the American war; of Busch's 21 cases 7 were saved—i.e. 33½ per cent. The proportion is the more favorable the less acute the cases are. Where the symptoms become alarming on the first or second day of the attack, where the pulse rises to 90, to 120 beats, and the temperature exceeds 40° C., no hope is left. The intensity of the single attacks, the rapidity with which the convulsions spread from one group of muscles to the other, are of bad augury. When, shortly after the first warnings, the neck gets stiff, the teeth cannot be separated, when soon after the convulsions reach the trunk and extremities, and the tonic spasms change into clonic, the patients usually die. On the contrary, there is more chance of recovery when the mobility of the neck is only slightly interfered with, when the difficulty of opening the mouth increases slowly, when to the affections of the muscles of deglutition and mastication either no general convulsions supervene, or the muscles of the trunk and extremities suffer only at a late period and moderately. The time the disease lasted varied in Busch's cases from twelve days to a month.

Demme treated 22 cases with curare, 8 of which recovered, Busch 11 cases, 5 of which ended fatally. Of the 6 who recovered, one owed his health more to morphia given subsequently to the curare than to the latter. In very acute attacks Busch thinks it of no use to try curare; he treated his first 9 cases with morphia and inhalations of chloroform. He had one remarkably bad case where a quarter of a grain of morphia was injected every two hours, and the patient recovered, contrary to all expectation. The mode of exhibiting the curare was by subcutaneous injection; 1-50th to 1-36th grain of the pure article will suffice, injected every two hours. The 11 cases are related in which this was done, and the post-mortem appearance given in some.