skin is largely insensitive; moreover, the internal pain is so great as to overshadow external pain. A point of practical importance, not mentioned in the text-books, is that of wrapping up the head and applying heaters there. This apparently gave especial comfort to our patient. Elevating the foot of the bed is of some use.

In the treatment during convalescence, a simple diet, as of milk, whites of eggs, arrow-root, ice-cream, etc., is best. Of drugs, protectives and demulcents, bismuth, flax-seed and oils are of value. For tonics, rest, food, fresh air, massage, electricity and, perhaps, strychnia and iron, are of importance, in the order named. While some patients have been reported as well on the next day, it is not uncommon to have convalescence delayed many days, even weeks.

APPENDIX.

CASE 1. P. F. Brick, M.D., of Iowa. *Journal American Medical Association*, 1887, vol. viii, p. 567. Tincture, seven drachms. Recovery. Emetics, morph., gr. 1-2; ex. digitalis, fl. gtt. 6; strychnia sulph., gr. 1-160; brandy, oz. 1; all hypodermically. By the mouth, two gallons of warm water; ex. digitalis, fl. gtt. 20; coffee, pints 11; whiskey, pints 3; ex. nucis vom. fl. drachm 1-2; port wine, pint 1-2.

CASE 2. T. H. P. Baker, M.D. *American Practitioner and News*, Louisville, 1887, vol. iv, N. S., p. 122. About eight drops of concentrated fluid extract. Recovery. Emetics, coffee, whiskey (dessertspoonful). Heat. Friction and sinapism.

CASE 3. C. C. Bradley, M.D. *New York Medical Record*, 1887, vol. xxxii, p. 155. Fleming's tincture, one and one-half ounces. Recovery. Emetics, brandy, ether, digitalis, ammonia carb. Amyl nitrite and warmth.

CASE 4. S. Barnett, M.D. *New York Medical Record*, 1887, vol. xxxii, p. 761. Tr. aconiti rad., one-half ounce. Recovery. Brandy by mouth and hypodermically. Ether. One quart of cold black coffee. Heat and posture.

CASE 5. Clara T. Dercum, M.D. *Medical and Surgical Reporter*, Philadelphia, 1889, vol. lxi, p. 376. Amount not known. Patient intoxicated at the time. Symptoms of acute poisoning. Recovery. Emetics, brandy, ammonia and digitalis by the mouth. Sixty minims of tr. digitalis, hypodermically. Heat.

CASE 6. Byron F. Dawson, M.D. *Medical and Surgical Reporter*, Philadelphia, 1890, vol. lxii, p. 7. Tr. aconiti, amount not known. Child, sixteen months. Marked toxic symptoms. Recovery. Brandy and fl. ex. digitalis, frequently repeated in spite of vomiting.

CASE 7. Benj. Edson, M.D. *New York Medical Record*, 1890, vol. xxxviii, p. 365. Tr. aconiti, two drachms. Death.

CASES 8, 9 and 10. Dr. Edson mentions certain other cases known of, but not treated by him, three of which died. The amounts taken in these were from one to four drachms.

CASE 11. L. M. Whannel. *British Medical Journal*, 1890, vol. ii, p. 791. Tr. aconiti (B. P.), one ounce. Death in sixty-five minutes. Mustard, lavage, heat, ether and brandy subcutaneously.

CASE 12. Ditto. Fleming's tincture, one drachm. Recovery. Zinc sulph., tr. digitalis, m. 20, hypodermically. Whiskey, oz. 1, by mouth; followed by calomel, gr. 8.

CASE 13. T. F. H. Smith. *British Medical Journal*, 1893, vol. i, p. 1109. Fleming's tincture, one teaspoonful. Recovery. Mustard, sp. ammon. comp. (B. P.), tr. bellad., brandy.

CASE 14. Henri E. R. Altenloh. *New York Medical Journal*, 1893, vol. lxxvii, p. 358. Ex. acon. fl., four drachms. Recovery. Emetics: atropine and brandy subcutaneously.

CASE 15. G. H. Tuttle, M.D. *Boston Medical and Surgical Journal*, 1891, vol. xxv, p. 678. Tr. aconiti, seven and a half drachms. Recovery. Mustard, digitalis and brandy subcutaneously; digitalis, nux vom. and brandy by rectum; ether and ammonia by inhalation; brandy and ammon. carb., by mouth later.

CASE 16. Ditto. Mentioned by, but not seen by Dr. Tuttle. Tr. aconiti, five and a half drachms. Death.

CASE 17. M. A. Warriner, M.D. *New York Medical Record*, 1891, vol. xxxix, p. 521. Preparation not noted. Four teaspoonfuls. Recovery. Sulphate of copper, digitalis, wine by mouth; whiskey by rectum; whiskey, strychnia, gr. 1-25; digitalin, gr. 1-50, hypodermically.

CASE 18. S. Q. Robinson, Assistant Surgeon, U. S. A. *Boston Medical and Surgical Journal*, 1892, vol. cxxvii, p. 192. Tr. ac. rad., two drachms. Recovery. Apomorphia, stomach-tube, tr. digitalis, m. 25, sp. ammon. arom., m. 45, brandy, drachms 2, subcutaneously, heaters, sinapism to precordia.

CASE 19. Wm. Hardman. *British Medical Journal*, 1893, vol. i, p. 1320. Tin. aconiti (B. P.), thirty minims. Recovery. Salt and water, one and a half hours after poison. Zinc sulph., two hours after poison. Charcoal, brandy and water by mouth.

CASE 20. J. D. Leigh, M.B. *Edinburgh Medical Journal*, 1895, vol. xl, p. 638. Preparation not stated. Five drops. Recovery. Belladonna and strophanthus, champagne, brandy, heaters.

Clinical Department.

A CASE OF ATROPINE POISONING.¹

BY H. F. VICKERY, M.D.

THIS last week I had a case of poisoning of a mild degree from the use of the British Pharmacopœia's unguentum atropinæ upon the intact skin of the breasts of a patient whose child had been dead some days before delivery at term. My object was to prevent the secretion of milk. The nurse had been warned what the symptoms of atropine poisoning were, and no damage was done. The strength of this ointment is eight grains to an ounce. It had been applied to both breasts, with pressure, for three days, when this occurred. The pupils were much dilated with paralysis of accommodation; the throat dry; the heart rapid, (partly, however, from fright, because it was 160 when the nurse took it, and after I talked with the patient a while it came down to 120).

No serious symptoms developed. The disturbance passed away; but it illustrates the fact that ointments are capable of producing physiological effects through the unbroken skin.

It may be added that very little milk was secreted, and that the breasts gave no trouble whatever.

New Instruments.

A NEW MODIFICATION OF THE HIP SPLINT.¹

BY JOHN DANE, M.D., BOSTON.

THE groundwork for the splint shown in the accompanying picture is what has long been known as the "Thomas knee splint." To this has been added a Burrell screw extension, by which it can be somewhat lengthened as occasion may demand. At the bottom there is a windlass and cog-wheel, whereby traction can be made upon the ends of a plaster extension applied to the leg. At the top it is fitted with a pelvic band similar to that now used upon the Taylor hip splints; but so adjusted by means of a hinge joint, that it can be carried sideways when the splint is being put on, and then locked into position by a simple key. The rather broad leathers are sewed to the outside upright, and go thence around the leg and the inside upright as well, lacing up in the front. The upper one is worn as high as possible, the top of the lower should come just below the patella. The perineal strap (when one is necessary) is made of linked window chain, padded with felting and covered with Canton flannel. This is riveted to the splint behind, and fastened in front by being slipped over a hook. When the proper length has been found, all superfluous links of the chain are cut off.

The advantages claimed for the new splint are:

(1) That while it is as easy to adjust upon a sensi-

¹ Shown before the American Orthopedic Association at its Annual Meeting held in Washington, D. C., May 4, 1897.

² Read before the Clinical Section of the Suffolk District Medical Society, February 17, 1897.