THE DOUCHE.

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THE remarkable therapeutic success attained by the French physicians, chief among whom stands Charcot, with this method of utilizing water in many diseases which prove rebellious to medication and all other treatment, warrants a brief descriptive explanation of this hydriatric procedure.

The drawing illustrates the act of douching, the attitude of physician and patient, and the apparatus. The douche is a method of applying water, in a more or less concentrated form, in a stream propelled by more or less atmospheric pressure.

The effects aimed at by all hydrotherapeutic procedures are thermic and mechanical.

The sudden impact of cold or cool water upon the periphery produces a contraction of the coats of the cutaneous vessels; the shock thus induced is conveyed to the central nervous system, thence by reflex to other organs.

The gasp for breath illustrates the reflex effect upon the respiratory centre. The blood is driven from the surface to the deeper parts, but returns as soon as the douche is discontinued, under the physiological law of reaction. This is the aim of the douche—to arouse dormant vital energy by inducing reaction in the various parts to which it is applied.

It is a discipline to the peripheral nerves and vessels which no medicinal agent is capable of inducing. The ebb and flow of blood and reflex action aroused by the douche represent in brief its chief effect.

These manifestations are modified according to the temperature and mechanical action. The former is under control by admixture from the supply pipe of cold and warm water; the latter by increasing or diminishing the atmospheric pressure. Just as the thermometer indicates the temperature of a douche so does the pressure gauge indicate the mechanical effect.

In the accompanying drawing the hot water supply is at H, under control of the valve H; the outlet into the hose is at H, H. The cold water supply pipe is at C, under control of the valve C; its outlet is into the main exit pipe, controlled by the valve at C, H. The water mixes at M. According to the opening in the valves the hot and cold currents are admitted and controlled as they are in an ordinary bath-tub.

At R, B, is the supply pipe for the rain-bath. At G is the pressure gauge. W is the waste

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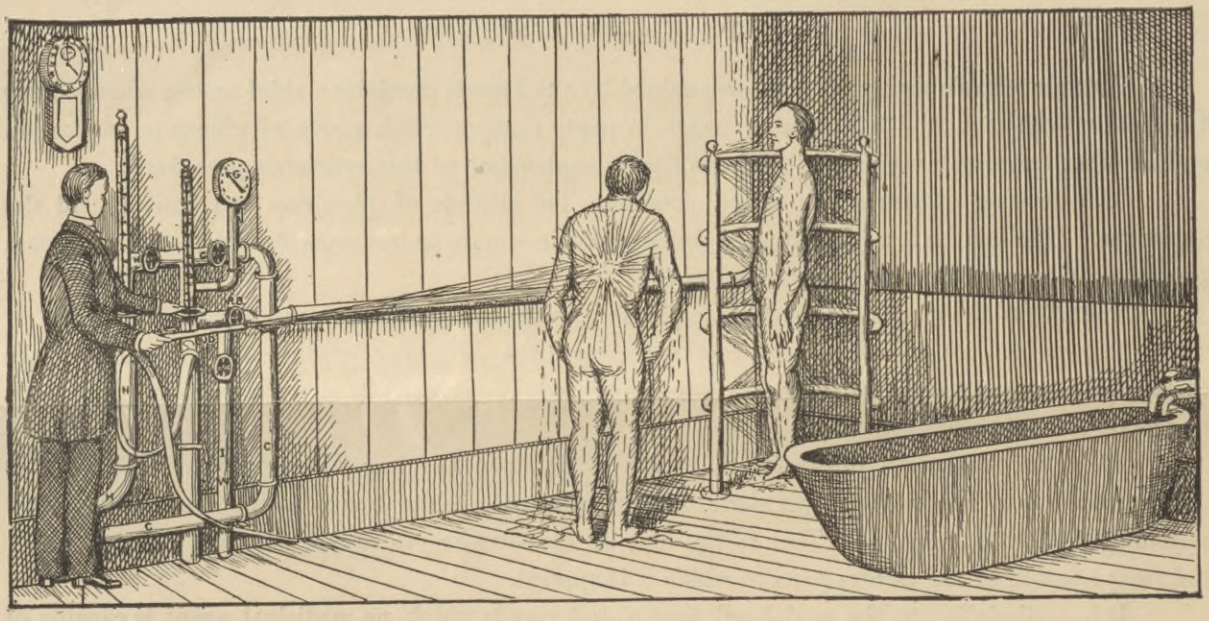
pipe. Through the latter the water is allowed to run until the temperature is adjusted. The manner of application is shown in the drawing.

This represents at J, D the jet douche. This may be changed by attaching the sprinkling nozzle to the spray douche, or by applying a flat piece of metal over the nozzle outlet into a fan douche.

The rain-bath R, B, is a douche driving a large number of jets upon the skin. Their impact under a pressure of 20 lbs. is sufficient to dilate the peripheral vessels, illustrating the valuable reactive effect of such a bath.

The therapeutic applications are varied.

For anæmia and general debility, without organic involvement, with or without gastric



DOUCHE ROOM AT THE HYDRIATRIC INSTITUTE, NEW YORK.

trouble, the rain-bath from 65° to 75° is of great value. In the Montefiore Home its chief application has been in phthisis. Numerous excellent results are recorded in this institution of restoration to apparent health, of cases whose object in coming to the institution was to spend their remaining days in comfort.

Administered daily for two to five minutes, from 65° to 80°, it relieves pyrexia, improves the appetite, deepens the respiration, steadies and slows the heart, and refreshes the nervous system, through which it gives tone to all the systemic functions.

In neurasthenia (of the depressed or melancholic type), with or without gastric, cardiac, or other manifestations, the jet or fan douche, at 45° to 50°, which promenades over the body for five to thirty seconds, under a pressure of 20 to 30 lbs., is a therapeutic agent of approved value. In the same type of hysteria also this douche is efficacious, as demonstrated by Charcot.

In the erethetic types of these diseases, and in other neuroses, accompanied by manifestations of excitement, the douche is inapplicable. In these cases the German method of wet packs are useful.

In chronic gastric disturbances, accompanied by anæmia or depression, the douche at 60° to 75° under a pressure of 20 lbs., for two to four minutes, or the rain-bath, has afforded me good results after dietetic and other treatment has failed.

In simple anæmia or chlorosis, in all organic diseases in which a faulty hæmatosis is manifested, the cold douche has signally demonstrated its value on the hæmometer of Fleischl. In obesity, chronic gout, and rheumatism, striking curative results have been obtained from hot-air baths (to which the head is not exposed) followed by cold general douches. Locally, the Scotch douche, consisting of alternating hot and cold streams to the swollen joints, encourages absorption of pathological product. In obesity and other disturbances of perverted tissue metamorphosis, this method of diverting the latter into normal channels has been clinically and experimentally successful. (See A. Frey in Volkmann's *Sammlung Klinischer Vortraege.*)

In locomotor ataxia and other spinal or cerebral organic lesions, the cold douche must be avoided as a dangerous remedy, while warm and hot douches and rain-baths, under slight pressure—ten to 15 lbs., and of long duration (5 to 10 minutes)—will be found useful. The warm bath, judiciously applied with friction by an attendant, is far more efficacious in these cases, as shown by Leyden and Hoesslein.

The chief element in this as in all other hydrotherapeutic procedures is precision. Upon this depends success, and to its absence may be charged all failures and unreliable results.

In the douche apparatus here illustrated, three instruments of precision are utilized, the second clock, noting duration, the pressure gauge, noting force of impact, and the thermometer, noting temperature.

Upon the judgment of the physician depends the selection of the case. That the profession in this country has not yet appropriated a therapeutic agent of such great value as water may probably be accounted for by the fact that the empirics, having energetically espoused it, have brought it into disrepute.

This brief descriptive article is intended by the author to recall the fact that water is an orthodox remedy, upon which Hippocrates wrote an able treatise (he brought out the fact too little regarded in this enlightened time even, that cold water excites and stimulates, while warm water soothes and depresses), and which enjoys the earnest advocacy of clinicians like Ziemmssen, Semmola, Erb, and Charcot.

NOTE.—The Douche Room here depicted is built of marble walls, eight feet high, resting upon a slanting floor of boards covered with zinc. The lower edges of the wide marble slabs rest within the upturned border of zinc, thus readily conducting the water falling from them upon the floor. Upon the latter rest small wooden sleepers, supporting a slatted floor, which permits the water flowing from patients at once to fall upon the slanting zinc floor, which conducts it to the drain.

Baruch Simon
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