

its portability, and the fact that it can always be kept in readiness for use, render it far superior as a therapeutic agent."

There are numerous methods of collecting and compressing the snow, but that advocated by the author has stood the test of time, and by its means "a compressed tablet or cone, possessing all the properties requisite for successful therapeutic treatment can be produced in a few minutes with a minimum of waste."

Carbon dioxide snow is prepared from carbon dioxide gas which is sold in wrought steel cylinders, in which it is compressed to the point of liquefaction. It is readily obtainable, as it is used largely in the preparation of aerated waters. "Each cylinder is provided with a stop cock, which can be opened by means of a special key (which is always provided) and a screw nozzle for connecting it with any tube or apparatus necessary. . . . When the nozzle is opened and the semi-fluid gas is allowed to escape into the atmosphere, the sudden expansion causes a rapid fall of temperature, and a fine snow is formed having a temperature of  $79^{\circ}$  C.— $110^{\circ}$  F. At  $78^{\circ}$  C. carbon dioxide returns to the gaseous state. For the purpose of collecting snow, it is necessary that the cylinder should be inverted, or at any rate tilted, so that the stop cock and nozzle are on a much lower level than the base. . . . If a folded up towel, or a piece of wash-leather or lint, be tied or held over the nozzle,

while the key is slowly turned so as to release a good flow of the gas, the snow will collect inside. On examination, this proves to be a white powder, which can be compressed like ordinary fine snow. It is extremely cold, but can be handled with safety, so long as it is not pressed upon the tissues."

A collector and applicator, designed by Mr. Hall-Edwards, makes it possible to obtain the small and necessary amount of snow for one

treatment without undue waste, and also renders it unnecessary to transfer the snow from one piece of apparatus to another in order to properly compress it and produce a stick or crayon of the desired size. Combined with the collector is a compressor, with the aid of which a compressed tablet or cone can be prepared in a few minutes.

Carbon dioxide snow in solution can be prepared with ether and absolute alcohol, and forms what Dr. Knowsley Sibley, who suggested the combination, describes as a mixture which may be considered "for all therapeutic purposes, a preparation of liquid air, but without its unstable character, and dangerously low temperature."

Our illustrations shows an application of the solid snow, and the author emphasises the great care that must be taken not to administer an overdose, and special care must be exercised when dealing with babies and young children, and where the lesion is situated immediately over bone.



Untouched photograph showing china-like white surface produced by the application of solid carbon dioxide snow. Photographed immediately after the application and before thawing commenced.

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