

to Health," an interesting account is given of "Caisson Disease" and "Divers' Disease" due to too sudden exposure to change of atmospheric pressure, when working under deep water, as in the construction of the Forth Bridge. The disease begins with pain and sickness; paralysis of the lower limbs sets in, and death may occur speedily. A pressure equal to that of four or even six atmospheres is thus sometimes borne, and, if gradually attained, is not necessarily injurious.

In the "Compressed air bath," at the Brompton Hospital, the pressure rarely exceeds an addition of 10 lb. to the square inch, or $\frac{2}{3}$ of an atmosphere. Half an hour is given to reach this pressure, it is maintained for an hour, and half an hour is occupied in reducing it to the natural pressure; thus all danger of sudden change is taken away, and it is found that, in asthmatic cases, marked benefit is often secured by the compressed air.

The value of rarefied air, as at Davos, St. Moritz, or Denver is great; the analysis of cases thus treated shows an improvement in $\frac{2}{3}$ of the cases.

"In general results, the English home counties yield the smallest percentage of 'improvement,' and the largest of 'worse.' Next comes the Riviera, not much better; then, with a rise of 12 per cent. 'improved,' are sea-voyages, the percentage of 'worse' being still large. 'High altitudes' win easily in all categories, with their 83 per cent. 'improved,' and only 14 $\frac{1}{2}$ per cent. 'worse.'"

It must be admitted there is strong evidence in favour of high altitude treatment. The value of such comparisons would be enhanced if we could be certain the patients pursuing different forms of climate treatment conformed to the same rules of hygiene and dietetics.

The concluding chapter of the book, "On the High Altitudes of Colorado," gives the results of Dr. Theodore Williams' recent visit to Denver, and is thus epitomised:

"The climate of Colorado is dry and sunny, with bracing and energising qualities, permitting outdoor exercise daily throughout the year. It has rescued many consumptives from a life of invalidism. Its exhilarating influence may be traced in the wonderful enterprise which the Colorado people have shown in developing their country. Thirty years ago Denver did not exist; it is now a well-built and well-organised city of 150,000 inhabitants."

This short survey must suffice to show that in the work before us facts are collected and arranged which cannot but prove of essential service to the public, and especially to the medical profession seeking the newest information concerning aero-therapeutics.

OUR BOOK SHELF.

Histories of American Schools for the Deaf, 1817-1893. Edited by Edward Allen Fay, Ph.D. In three volumes (Washington, D.C.: the Volta Bureau, 1893.)

FOUR hundred years ago the great double-continent of America was discovered, and almost contemporaneous with that event was a second discovery of, perhaps, less apparent but no less real importance. In the fifteenth century Rodolphus Agricola recorded the first instance of a deaf-mute who learned to read and write, and not long afterwards Girolamo Cardano, a fellow-countryman of Columbus, insisted that the instruction of individuals thus afflicted was possible though difficult, and, going farther, stated clearly the principle on which such instruction depends.

Like many another beneficent discovery, that of Cardano was long in finding recognition, and, although there were isolated cases instructed in Spain, England, Holland, France, and Germany, it was but a century and a half ago that the theory began to be put into practice. Paris claims the merit of giving the first start to the work of benevolence, Abbe de L'Épée there establishing his school in 1760, similar institutions rising in Dresden and Edinburgh about the same time. From such a beginning has sprung a work which, though carried on for the most part in silence, stands foremost in the philanthropic labours of the world—a work that must have brought light and happiness to many thousands of our less fortunate brethren, and been the means of developing valuable intellects which might otherwise have been lost to the community. Some idea of its quiet but steady progress may be gained from the following facts:—In 1836 there were 134 schools for the deaf in the world, in 1883 there were 397, and in 1893 the number had risen to 435. In the United States fifty years ago there were but six schools, in Canada and Mexico none, while in the three volumes before us are the histories of 79 schools in the United States, seven in Canada, and one in Mexico, which instruct, respectively, 7,940, 682, and 34 pupils.

True charity works, as a rule, in the dark; the outside world knows little as to its achievements, and seems to care as much. Here, however, can be learned something of its labours in one direction and its untiring energy appreciated. We hear little about similar institutions in this country, although they certainly exist, and a volume compiled on similar lines to the one at present under review would be welcome to all who have to do with deaf persons. This book, prepared for the Volta Bureau in commemoration of the four-hundredth anniversary of the discovery of America, contains, as we have said, the histories of eighty-seven schools for the deaf and dumb. These histories, which fill three large volumes, were nearly all prepared by the heads of the schools, and, many of them being written by the deaf and dumb themselves, they form a lasting monument of the excellence of the work done. By the help of excellent portraits and photographs the information to be gained is made exhaustive, and the reader becomes acquainted not only with the work done, but with the lives of many of the workers, lives which are worthy of a place among those who truly follow in the footsteps of Him who "made the deaf to hear and the dumb to speak."

P. MACLEOD YEARSLEY.

Monograph of the Stalactites and Stalagmites of the Cleaves Cove, near Dalry, Ayrshire. By John Smith, Vice-President of the Geological Society of Glasgow. (London: Elliot Stock, 1894.)

THE author has taken advantage of the opportunity afforded by the exploration of a cavern in the Lower Carboniferous Limestone, to study the various forms of deposit produced by the percolating waters. He appears, from his preface, to be under the impression that nothing has been previously written on the subject of stalagmitic deposits, and no references to any earlier literature occur in his pages. This is unfortunate, as a study of the writings of Cöhn, and others who have investigated the action of plants in promoting the deposition of calcium carbonate, would have helped him to solve some of the difficulties he has experienced.

The author classifies the different forms of deposit as "a stalactite" (when it is a pendent icicle-like mass), "a stalagmite" (when a similar mass, rising from the floor), "sheet stalagmite," "wall stalagmite," "tear-bands," "ribs" and "combs," all of which terms explain themselves. He would have done well to consult a botanist before applying the name *Gallionella* to the "confervoid filaments" found in the chalybeate water.

The 18 pages of text are illustrated by 36 plates,