

DR. FITCH'S REPORTS ON THE INSECTS OF N. Y.

These valuable reports issued by Dr. Fitch, on the Entomology of the State, have been read in this country with much interest and profit, and are, we are pleased to see, receiving abroad the commendation they deserve. In France, where this science finds its most profound and thorough students, liberal commendation has been awarded to them. Dr. Lindley in a late number of the *Gardener's Chronicle*, calls the work of Dr. Fitch, "a very valuable contribution to practical Entomology," and in speaking of the system employed in its arrangement, adds, "Such is undoubtedly the true way of rendering entomological information useful to the mass of mankind; and it is greatly to be regretted that the valuable observations of Curtis and Westwood, in this country, should not be collected and arranged in a similar manner. That Dr. Fitch is an observer of a high order is manifest upon every page of the volume before us; his statements are rarely made at second hand, and where they are so the reader is never led to suppose otherwise. What, too, is very important, the mode of applying to a practical purpose the knowledge he conveys respecting insect manners of life is always kept steadily in view; so that while on the one hand we are told what an insect does, and how he does it, on the other we are instructed in what manner he may be destroyed." After giving several extracts from Dr. Fitch, including most of his preface, Prof. L. says: "We shall occasionally extract other matter from Dr. Fitch's useful work; in the mean while we have only to add that it has an index, which might be taken as a model by some of our careless friends on this side of the Atlantic."

ARTIFICIAL WHALEBONE.

It would almost seem that science, in its rapid march, would finally procure for the great whales of the deep, a respite from the tormenting and deadly assaults of the harpoon. Artificially made oils and fluids are steadily displacing animal products for purposes of illumination, and now by a somewhat recent discovery the bone of the whale is no longer needed to supply our umbrella and skirt makers with skeleton frames. In 1855, Joseph Kleeman, of Meissen, Germany, obtained a patent for a mode of preparing a substitute for whalebone. The process has been put into practice by a firm in New York city, who are turning out about twenty thousand umbrella frames every week! It consists in taking sticks of the common ratan, and soaking them in a liquid extract, for about four days, after which they are immersed in a solution of any of the iron salts, which gives the ratan a deep black dye. Subsequently the sticks are exposed in a close vessel, for the space of about one hour, to the action of steam of about three or four atmospheres' pressure, and then thoroughly dried in a furnace or drying room, at a temperature of about 180 degrees Fahrenheit, when they become ready for the impregnating process.

The sticks are then placed into an iron cylinder, (capable of standing the pressure of at least ten atmospheres) connected by a pipe with an open vessel, containing a varnish made by dissolving 120 parts of shellac, and 200 parts of Burgundy pitch, in 90 parts of absolute alcohol. The air having been exhausted from the cylinder, the cock connecting it with the vessel containing the varnish is opened, when the atmospheric pressure will force the varnish into the cylinders and into the pores of the ratan.

The impregnation of the ratan is rendered more perfect by the use of a pump for forcing the solution into the cylinder. The ratan has now changed its character and become hardly distinguishable from the best quality of whalebone, except that it is somewhat more elastic and less liable to splinter and break. It has gained one hundred per cent. in weight by impregnation. After being removed from the cylinders, or impregnators, but little remains to be done in the way of drying, polishing, and fitting the ends, &c., to prepare it for use for umbrellas, parasols, &c., and various other purposes.—*Scientific American*.

FARMERS OF THE OLD SCHOOL.—Adam was a farmer, while yet in Paradise, and after his fall was commanded to earn his bread by the sweat of his brow. Job, the honest, upright, and patient, was a farmer, and his stern endurance has passed into a proverb. Socrates was a farmer, and yet wedded to his calling the glory of his immortal philosophy. Cincinnatus was a farmer, and one of the noblest of the Romans. Burns was a farmer, and the muse found him at the plough and filled his soul with poetry. Washington was a farmer, and retired from the highest earthly station to enjoy a quiet rural life, and present to the world a spectacle of human greatness.