



FIG. 13.—The Hydraulic Pump.

chine, which was made by Messrs. Milne, of Edinburgh, works up to a pressure of 4 tons on the square inch.

On the port side opposite the laboratory two cabins have been fitted up, as a light-room and a dark-room, for photographic work; and a corporal of Royal Engineers, C. Newbold, a very skillful photographer, has been established there. The management of a photographic studio during a long sea-cruise is a matter of great difficulty. All the circumstances—the motion, the dampness of the air, and its vitiation by vapors of various kinds, and the extremes of climate which affect the different re-agents and materials, all tell against the photographer; yet, in spite of these disadvantages, Newbold