APPENDIX No. 3.

THE HIGH PRESSURE SYSTEM FOR FIRE EXTINCTION.

In a paper read by the late Mr. Braidwood, when Superintendent of the London Fire Brigade, before the Society of Arts in 1856, he says :—

"From 1838 to 1843, £776,762 were lost in Liverpool by fire, almost "entirely in warehouse risks. The consequence was that the Mercantile "rates of Insurance gradually rose from about 8 per cent to 30, 40, and it "is said in some cases to 45 per cent.

"In Liverpool, Manchester, and other cities, the extinction of fires by "the pressure of water only, without the use of fire engines, is very much "practised. The advantages of this system are very great.

"The supply of water is the most vital part of any exertions towards "extinguishing fires. Where the pressure is sufficient, and the mains "large enough, by far the most economical mode of using the water is to "attach the hose directly to the mains."

On the discussion which followed the reading of the paper, Mr. Chadwick, C. B. said :—"He (Mr. Chadwick) had got the Police to note the "time which elapsed between the first alarm of fires and the arrival of the "engines, and the return upon the first group of observations, was thirty-"six minutes. It appeared that the engines traversed the streets, allowing "for obstacles, at a rate of ten miles an hour. Information would be con-"veyed to the stations of the brigade at a rate of five miles an hour. In "the case of the occurence of a fire within a mile of the station, the infor-"mation would be conveyed in twelve minutes, the horses would be put "to, and engines got out in about five minutes on the average ; it trav-"ersed the distance and arrived at the fire in about six minutes more ; "the water had to be got, and got into the engine, which would occupy "about five minutes, making about twenty-eight minutes, or for half a mile "distance, an average of not less than twenty minutes, which must occur "under the most favorable circumstances. This arrangement he could "not but consider as fatally slow. A pail full of water might suffice