

twenty-eight meters, the temperatures were not taken at entrance to the meter, but were taken at exit in most cases.

After the meter had been connected as above described, the outlet was closed by a cap, and the meter, pipes and holder were subjected to a pressure corresponding to three inches of water column for a period of five minutes. This test was to determine the condition of the case of the meter, and the results of it are set down in the table under the heading "Leakage." This leakage test is *not* the one prescribed in section (26 b) of the Act, but, as the requirements of this sub-section could not be carried out in reasonable time without opening the meters, I decided to substitute the above leakage test. As the sub-section is apparently meant to show whether a meter will register properly or not when passing a small quantity of gas at high pressure, I think the Gas Company will look after its interests in this respect, as it is apparently framed for the protection of the safety of gas.

The next test was that for percentage of error under the conditions described in section 26 (c). As required by the Act, the meter was tested under two different pressures, which were as near to one inch and to one-half an inch of water column as possible. In these tests the amount of air passed through the meter per hour was as near as possible equal to the capacity per hour stamped on the face of the meter, except in two cases.

Mrs. A. L. Martin and Cowan Avenue Firehall.—See Tables I. and II.

It was difficult to realize exactly the requirements of the Act either as to quantity or pressure; but, the actual conditions approached those required very closely in all cases, and the actual discharges and pressures are given in the table. The rate of discharge of the air was controlled by screwing a cap on the outlet of the meter, which had an orifice of suitable size to pass the desired quantity.

To test the accuracy of the wheelwork and recording devices as required by section 26 (a) of the Act, would require the opening and dismantling of each meter, and I did not desire to have this done. I had one of the meters opened and found the train of wheels correct. I also obtained one of the dials from the stock room of the Gas Company and found it to be correct. As I consider the liability to error on this point to be small, I did not carry the investigation further.

RESULTS OF THE TESTS.

Particulars as to the meters submitted to me for test are given in Table I. I have arranged them in groups as to the makers.

Col. 3 gives the date on the tin label soldered on each meter by the Gas Company.

Col. 4 gives the date of removal of the meter, and was taken from the tag attached to the meter giving the name of the consumer, etc.