

CANADIAN
ELECTRICAL NEWS

AND
STEAM ENGINEERING JOURNAL.

VOL. V.

DECEMBER, 1895

No. 12.

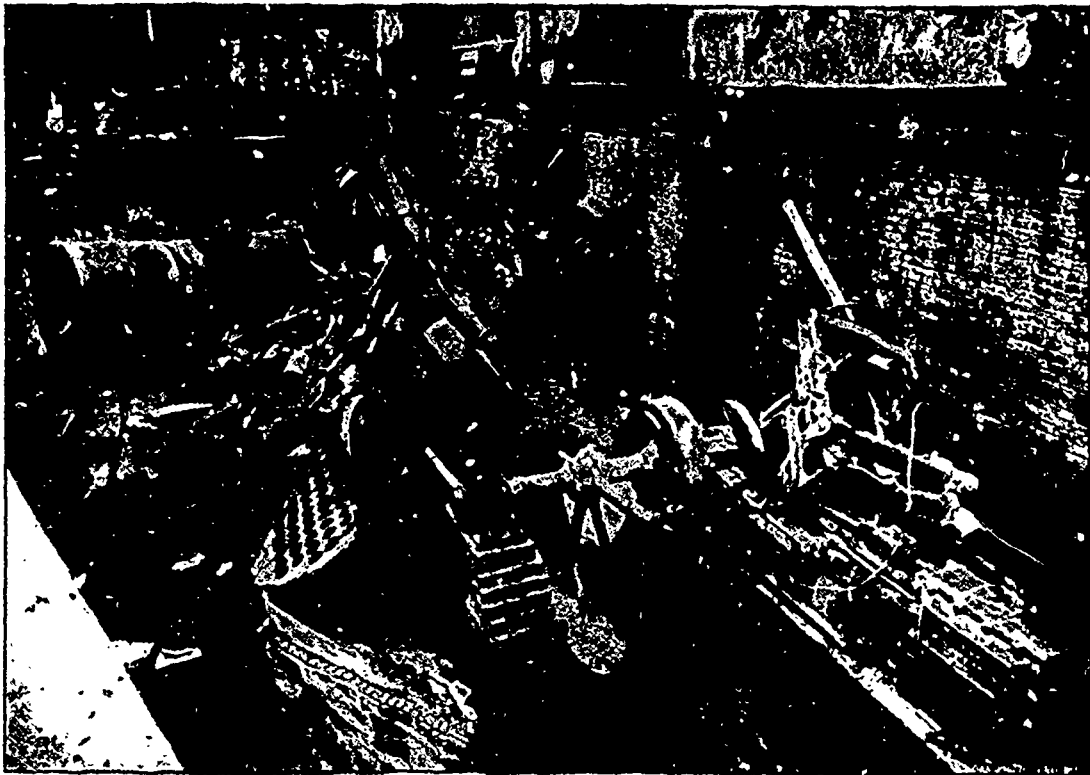
THE DETROIT BOILER EXPLOSION.

On the morning of the 6th November a steam boiler exploded in the Detroit Journal office, 45 and 47 Larned street west, by which 37 persons lost their lives and a number more were injured. The view we publish represents the scene of the disaster after all the debris had been cleared away, leaving, however, the boilers or parts connected with the boilers as nearly as possible in the position they were thrown by the explosion.

An investigation into the cause of the accident is

The boilers had been frequently inspected by the Detroit City inspector, and were supposed to be sound and good boilers. The amount of damage done by the explosion of one of them seems to confirm this view. At the coroner's inquest on the killed the jury were instructed to bring in a verdict that death was caused by a boiler explosion. The engineer has been indicted for manslaughter and it is probable that the full results of the investigation will be made public at the trial.

There does not seem to be any need for any sugges-



THE DETROIT BOILER EXPLOSION.

under way, but the authorities have been very reticent and have endeavored to prevent any one from getting near enough to touch any part of the boilers, except those engaged in the investigation. This much, however, is known, there were two boilers of the ordinary horizontal tubular type in the basement of the building and set side by side. The fuel used was oil, injected into the furnaces by steam jets. The engineer had steam on one boiler at about 85 lbs. pressure supplying steam for the engine. The other boiler had its outlet valve closed, and steam was being got up in it, the intention being to use it, and to stop the other one for cleaning.

When the engineer left the boiler room some time before the explosion the boiler which exploded had 15 lbs. pressure on it, and the outlet for the steam not open.

tion of mystery about the matter. The steam boiler was left with an oil fire under it, with no outlet for the steam, unless by the safety valve, and with 15 lbs. pressure on it. The pressure would rise rapidly, and as the fire was fed by oil forced in by the steam, it follows that the higher the pressure the fiercer the fire became.

The safety valve had either been too small or inoperative, and very soon the pressure became so great that explosion took place. From the fragments shown on the view it looks as if the cast iron manhole frame had given way first and the boiler had then torn into two sections. The other boiler was driven out of its seat into the wall, and was probably the cause of the fall of the building.

As showing how rapidly steam can be raised in a steam boiler, the test of the Merryweather fire engine