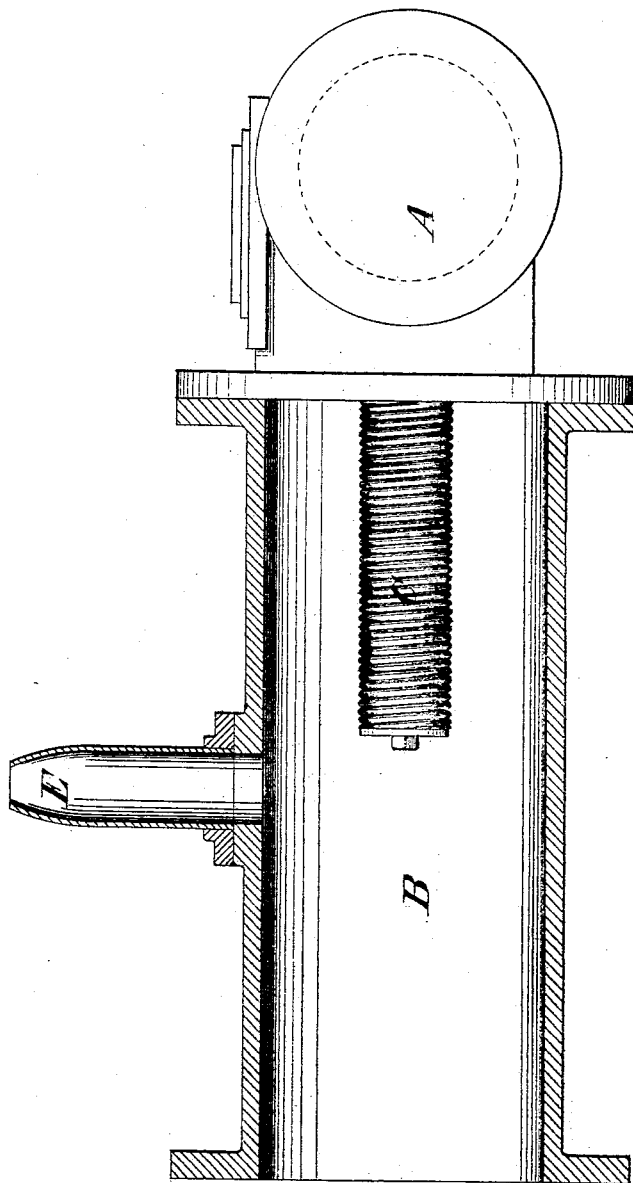


C. T. PARRY.

EXHAUST APPARATUS FOR STREET-ENGINES.

No. 191,545.

Patented June 5, 1877.



Witnesses,

Wm. P. Henszey

R. C. Wright

Inventor,

Chas. T. Parry

UNITED STATES PATENT OFFICE.

CHARLES T. PARRY, OF PHILADELPHIA, PENNSYLVANIA, ASSIGNOR TO
BURNHAM, PARRY, WILLIAMS & CO., OF SAME PLACE.

IMPROVEMENT IN EXHAUST APPARATUS FOR STREET-ENGINES.

Specification forming part of Letters Patent No. **191,545**, dated June 5, 1877; application filed
February 28, 1877.

To all whom it may concern:

Be it known that I, CHARLES T. PARRY, of Philadelphia, in the county of Philadelphia, and State of Pennsylvania, have invented a new and useful Improvement in Engines for Street Use, which improvement is fully set forth in the following specification, reference being had to the accompanying drawing.

The object of my invention is to diminish the noise of the escaping exhaust steam, and retain the force of the blast to create draft, in engines used for street purposes, the better to enable them to be safely used where horses are employed, without the danger of fright from the noise produced by the pulsations of the exhaust steam, as now in general practice.

By reference to the drawing, it will be seen that I place within an enlarged or chambered exhaust-pipe, B, between the cylinders A and the exhaust nozzles E, the mufflers C, into and through which the exhaust steam from the cylinders A is carried. These mufflers C may be formed of a coil of wire, and the expansion take place gradually through contracted spaces formed between the wire coils; or they can

be perforated with numerous holes for the same purpose, or other equivalent device. This expansion changes the exhaust from distinct pulsations to a gradual and noiseless discharge, and, being within the chamber, muffles the noise and permits the escape of the steam by the usual exhaust-nozzles E, thereby retaining all of the advantages derived by the concentrated jet through these nozzles E, for the purposes of producing blast, as is in general use.

I do not claim the chambered exhaust-pipe B nor the mufflers C; but

I claim as my invention—

The combination of the exhaust-chamber, exhaust-muffler located therein, and the blast-nozzle E, whereby the noise of the escaping steam is deadened and the force of the blast retained to create draft, substantially as and for the purpose set forth.

CHAS. T. PARRY.

Witnesses:

WM. P. HENSZEY,
R. C. WRIGHT.