

W. S. SALISBURY.
Exhaust-Draft Nozzle.

No. 226,204.

Patented April 6, 1880.

Fig. 1.

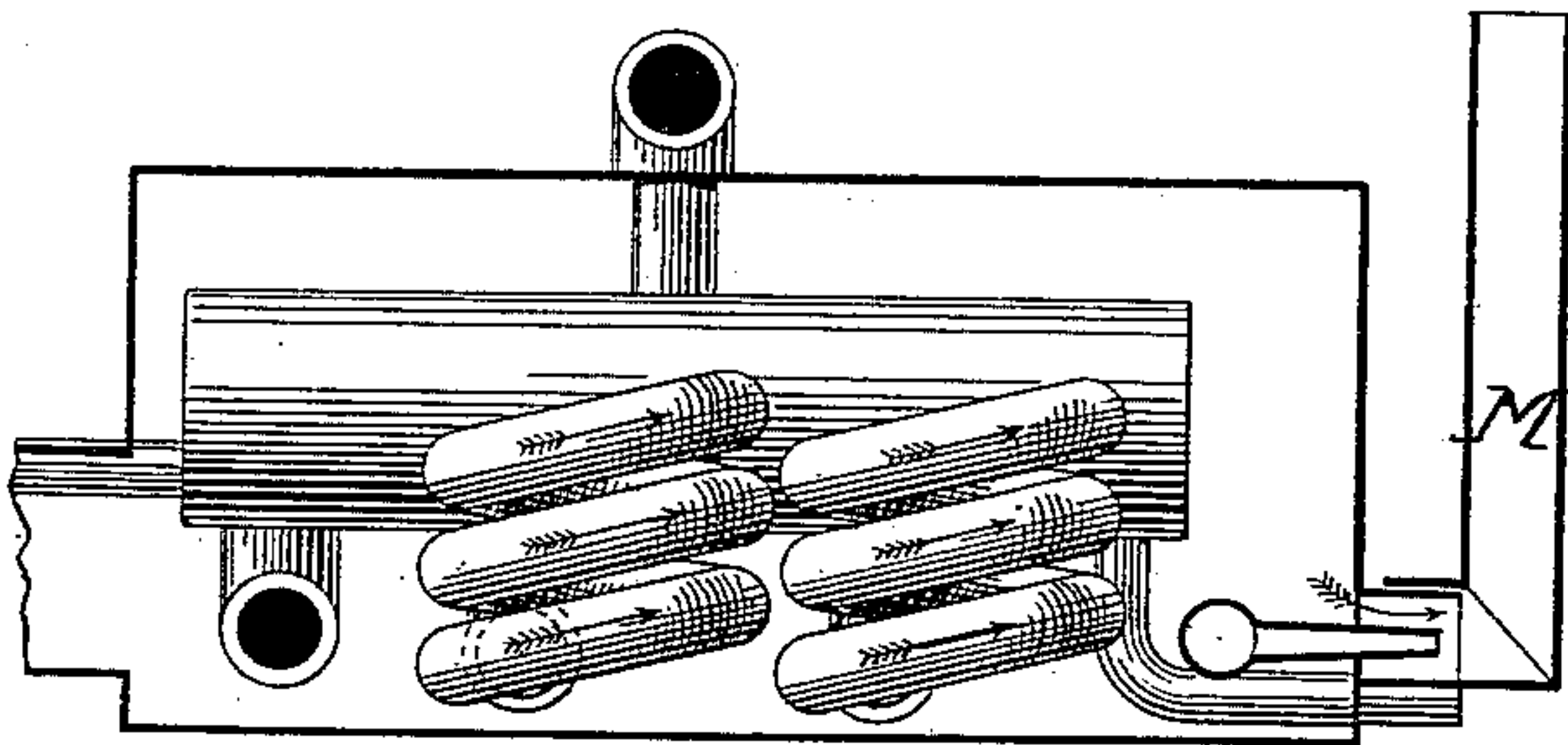
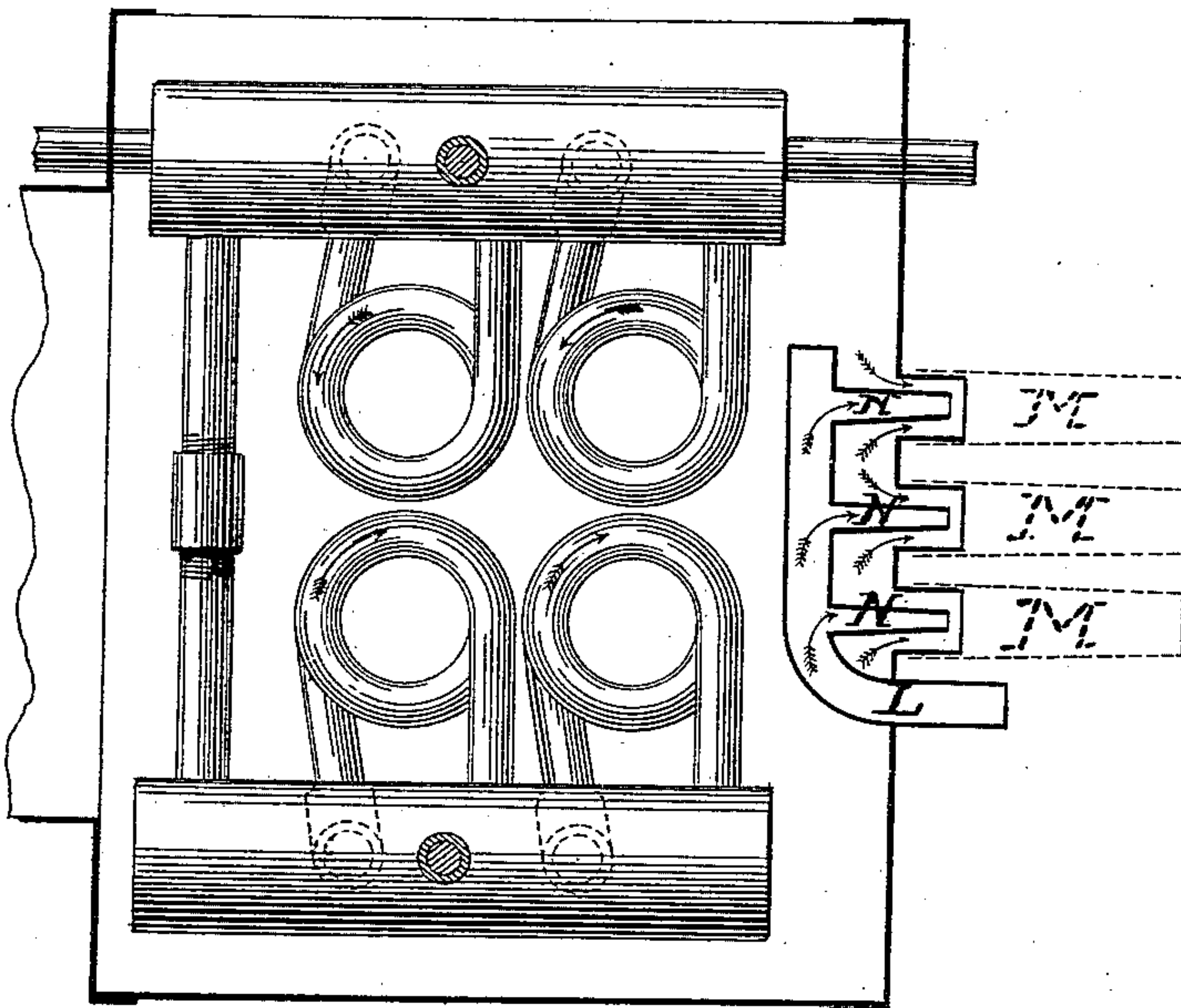


Fig. 2.



Attest:

Clarence Poole.
A. G. Heyman.

Inventor:

Wilbur S. Salisbury
by Ellen C. Ford
Attorney

UNITED STATES PATENT OFFICE.

WILBER S. SALISBURY, OF CHICAGO, ILLINOIS.

EXHAUST-DRAFT NOZZLE.

SPECIFICATION forming part of Letters Patent No. 226,204, dated April 6, 1880.

Application filed September 8, 1879.

To all whom it may concern:

Be it known that I, WILBER S. SALISBURY, of Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Exhaust-Draft Nozzles, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

Figure 1 is a sectional view of the horizontal coil-boiler taken on the line *x x* of Fig. 2, with the exhaust-draft nozzle and stack in position. Fig. 2 is a top horizontal view of boiler with the exhaust-draft nozzles and stacks.

The object of my invention is to produce a division in the exhaust by employing a series of nozzles fixed into the exhaust-pipe and extending into an equal number of stacks, whereby I may be better able to produce a strong draft and also dry out the exhaust much more readily.

When the same is applied to a horizontal coil-boiler, besides drawing the hot gases from the furnace along the bottom of the coils, I am thereby utilizing the same more directly in promoting the circulation in the said coils, resulting in a rapid generation of steam.

M M M are the smoke-stacks, and are placed near the bottom of the shell surrounding the water drums and coils.

N N N are the exhaust-nozzles, inserted in the exhaust-pipe L, leading from the engine. Said nozzles or blowers are located as centrally as possible in the stacks M M M, and are constructed with the opening as close as desirable for good draft. I find five pounds back-pressure generally sufficient on the exhaust.

In my numerous experiments I find better and more practical results in using a series of stacks and draft-blowers, and my experience is three blowers are as few as should be used, and as many more as practicable will give better results.

I am aware that a series of exhaust-nozzles has heretofore been employed for various purposes, and to such no broad claim is made in this application; but

Having described my invention, what I claim as new is—

A series of draft-exhaust nozzles, in combination with the horizontal coil steam-boilers, and a series of stacks, as herein shown and for the purpose set forth.

WILBER S. SALISBURY.

Attest:

J. W. HALL,

J. SEGUR SALISBURY.