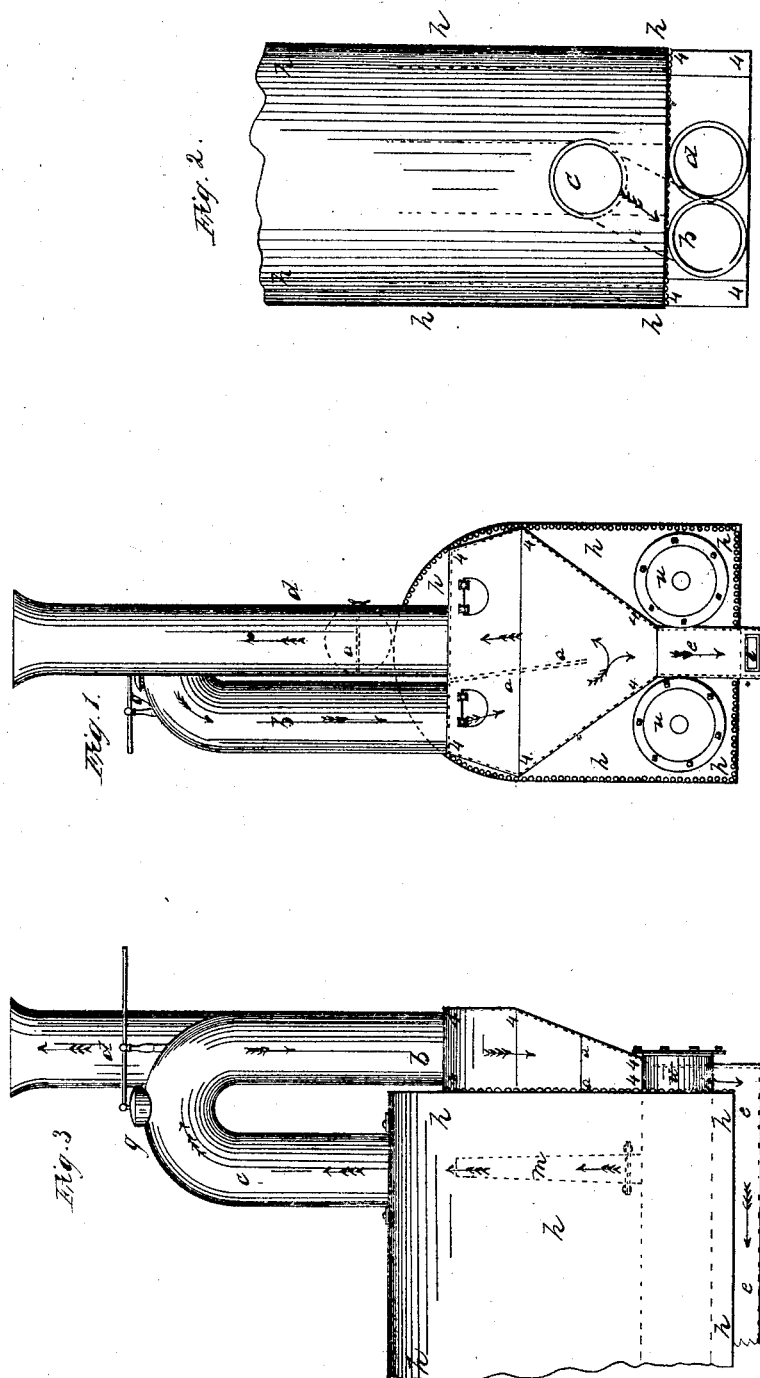


W. S. MONTGOMERY.  
SPARK EXTINGUISHER.

No. 858.

Patented July 28, 1838.



# UNITED STATES PATENT OFFICE.

WILLIAM S. MONTGOMERY, OF BALTIMORE, MARYLAND.

## SPARK-EXTINGUISHER.

Specification of Letters Patent No. 858, dated July 28, 1838.

*To all whom it may concern:*

Be it known that I, WILLIAM SHOTHERD MONTGOMERY, of Baltimore, in the State of Maryland, have invented a new and Improved Spark-Catcher for Locomotive and other Steam-Engines; and I do hereby declare that the following is a full and exact description.

The object of my invention is to prevent by a new mode the escaping of ignited sparks from the chimnies of locomotive and other steam engines and my manner of doing so is to apply to the front of the engine a receiver unequally divided by a partition for two-thirds of its depth, into the smaller chamber of which both smoke and sparks are forced to pass by a curved discharge pipe leading into it from the smoke box of the engine. The sparks being forced by the exhaust steam into a pipe that communicates to the ashpan, the smoke rising on the other side of the partition into the chamber of the receiver and passes off into the chimney.

What I claim as my invention and as new is—

The separation of the smoke and sparks by a chambered receiver into which the

smoke and sparks are compelled to pass and from which the sparks are driven into the ashpan, the whole being constructed and operating as herein described.

Referring to the drawings Figure 1, is a front view of the engine. *h, h, &c.*, is the body of the engine; *4, 4, 4, &c.*, the receiver; *a, a*, the partition in the receiver; *e, e*, pipe to convey the sparks to the ashpan; *c, b*, the discharge pipes; *d*, the chimney; *o* valve in the chimney to regulate the draft, and *w, w*, the cylinders.

Fig. 2 is a plan of the body of the engine. *c* is the discharge pipe—in other respects what has been said by way of reference to Fig. 1 can be applied with equal exactness to Fig. 2.

Fig. 3 is a side view of the engine; *m* is the exhaust pipe; *a, a*, the bottom of the partition in the receiver; *c, b*, the discharge pipe and *e, e* the spark pipe, in other respects same as Fig. 1 and Fig. 2 as the same characters correspond and apply to each figure.

WM. S. MONTGOMERY.

Witnesses:

JAMES REANY,  
EVAN J. MORGAN.