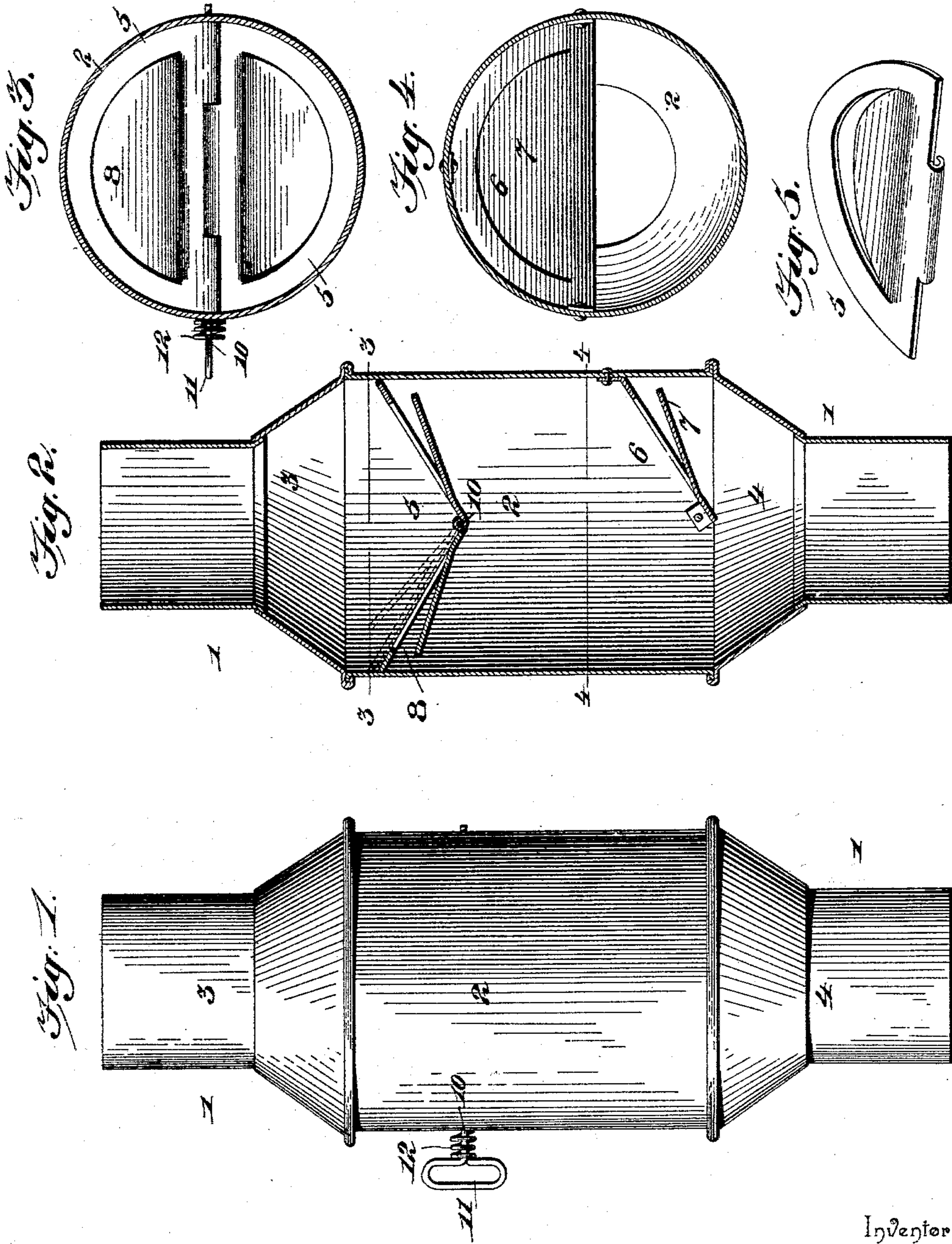


(No Model.)

R. McPHAILL.
STOVEPIPE.

No. 589,610.

Patented Sept. 7, 1897.



Inventor

Robert McPhaill,

Witnesses

H. G. Dieterich
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UNITED STATES PATENT OFFICE.

ROBERT MCPHAILL, OF BRENHAM, TEXAS, ASSIGNOR OF ONE-HALF TO
J. F. SCHRAMM AND W. SEIDEL, OF SAME PLACE.

STOVEPIPE.

SPECIFICATION forming part of Letters Patent No. 589,610, dated September 7, 1897.

Application filed February 12, 1897. Serial No. 623,145. (No model.)

To all whom it may concern:

Be it known that I, ROBERT MCPHAILL, a citizen of the United States, residing at Brenham, in the county of Washington and State of Texas, have invented a new and useful Stovepipe, of which the following is a specification.

The invention relates to improvements in stovepipes.

10 The object of the present invention is to provide a stovepipe adapted for cooking and heating stoves and capable of deflecting the sparks and of causing the same and soot to drop back into a stove and thereby avoid any liability of setting a house on fire or injuring the sections of stovepipe between it and a chimney.

20 A further object of the invention is to provide a stovepipe which will confine the heat to the stove and prevent the same from passing up the chimney or flue and at the same time not interfere with the draft.

25 The invention consists in the construction and novel combination of parts, as hereinafter fully described, illustrated in the drawings, and pointed out in the claims hereto appended.

30 In the drawings, Figure 1 is an elevation of a stovepipe constructed in accordance with this invention. Fig. 2 is a longitudinal sectional view, the damper being closed in full lines and shown open in dotted lines. Fig. 3 is a horizontal sectional view on line 3 3 of Fig. 2. Fig. 4 is a similar view on line 4 4 of Fig. 2. Fig. 5 is a detail perspective view of the damper.

Like numerals of reference designate corresponding parts in all the figures of the drawings.

40 1 designates a stovepipe-section provided with a central enlarged portion or chamber 2, which is cylindrical between its ends, and the latter taper toward the end portions 3 and 4 of the stovepipe-section. The end portions 3 and 4 are of the ordinary size, the upper end portion 3 being adapted to fit into another stovepipe-section and the lower end portion 4 being designed to fit upon a stove in the ordinary manner.

50 Within the chamber 2 of the stovepipe-section

is arranged an upper inclined deflector, a damper 5, and a lower inclined deflector 6, which is substantially semicircular and which extends across one-half of the chamber 2. The deflector 6 is secured at its curved edge 55 or periphery to the interior of the stovepipe-section, and it is provided with a curved slit, forming a segmental body portion 7 and arranged parallel with the curved edge of the deflector. The segmental body portion 7 of 60 the inclined deflector is depressed slightly and is arranged in a plane below the curved edge or peripheral portion and forms an opening whereby it is adapted to have sparks impinge against it and be deflected downward 65 and at the same time permit a sufficient draft at that side of the chamber 2.

The upper deflector 8 is constructed similar to the lower deflector 6, and the damper 5, which is hinged to the upper rigid deflector 8, is similarly constructed. The upper deflector 8 is located above the lower deflector 6 at the opposite side of the stovepipe-section, and the damper 5 is located directly over the bottom deflector, whereby a tortuous passage is provided for the smoke and other products of combustion, the lower deflector being adapted to stop the sparks at one side of the chamber and the upper deflector at the other side of the same. 80

The damper and the upper deflector converge downwardly and are provided near their curved edges with slits and have segmental body portions which are depressed below the planes of the peripheral edge portions. 85

The damper 5 is mounted on a shaft or rod 10, which is extended through the sides of the chamber 2 and provided with an exterior handle 11. A coiled spring 12 is disposed on the rod or shaft between the handle and the stovepipe-section and frictionally engages the parts sufficiently to maintain the damper at the desired adjustment. 90

The openings in the deflectors and damper 95 permit a limited draft when the damper is closed, and the diameter of the enlarged portion or chamber 2 of the stovepipe-section is sufficient to provide for all the draft desired when the damper is open. 100

It will be seen that the stovepipe-section is adapted to confine the heat in a stove and prevent it from passing out through the chimney or flue, that it serves as a spark-arrester, and that it will cause the soot to drop back into the stove. It will also be apparent that it will protect the other sections of a stovepipe and will prevent a house catching on fire by reason of flames or sparks passing into a chimney or flue.

What is claimed is—

1. The combination with a stovepipe-section, of an inclined segmental deflector arranged therein and provided near its upper edge with an opening, and a damper hinged to the deflector and inclining upward in the opposite direction, substantially as described.

2. A stovepipe-section provided with an inclined deflector arranged at one side thereof, and provided near its upper edge with a slit

and having its body portion depressed to form an upper opening, substantially as described.

3. The combination of a stovepipe-section, the upper and lower inclined deflectors located at opposite sides of the stovepipe-section and provided near their upper edges with slits and having their body portions depressed to form openings, and a damper hinged to the upper deflector and inclining in the opposite direction, said damper being provided with a depressed body portion and an opening similar to the deflectors, substantially as described.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

ROBT. MCPHAILL.

Witnesses:

C. G. BORTS,

THOS. B. BORTS.