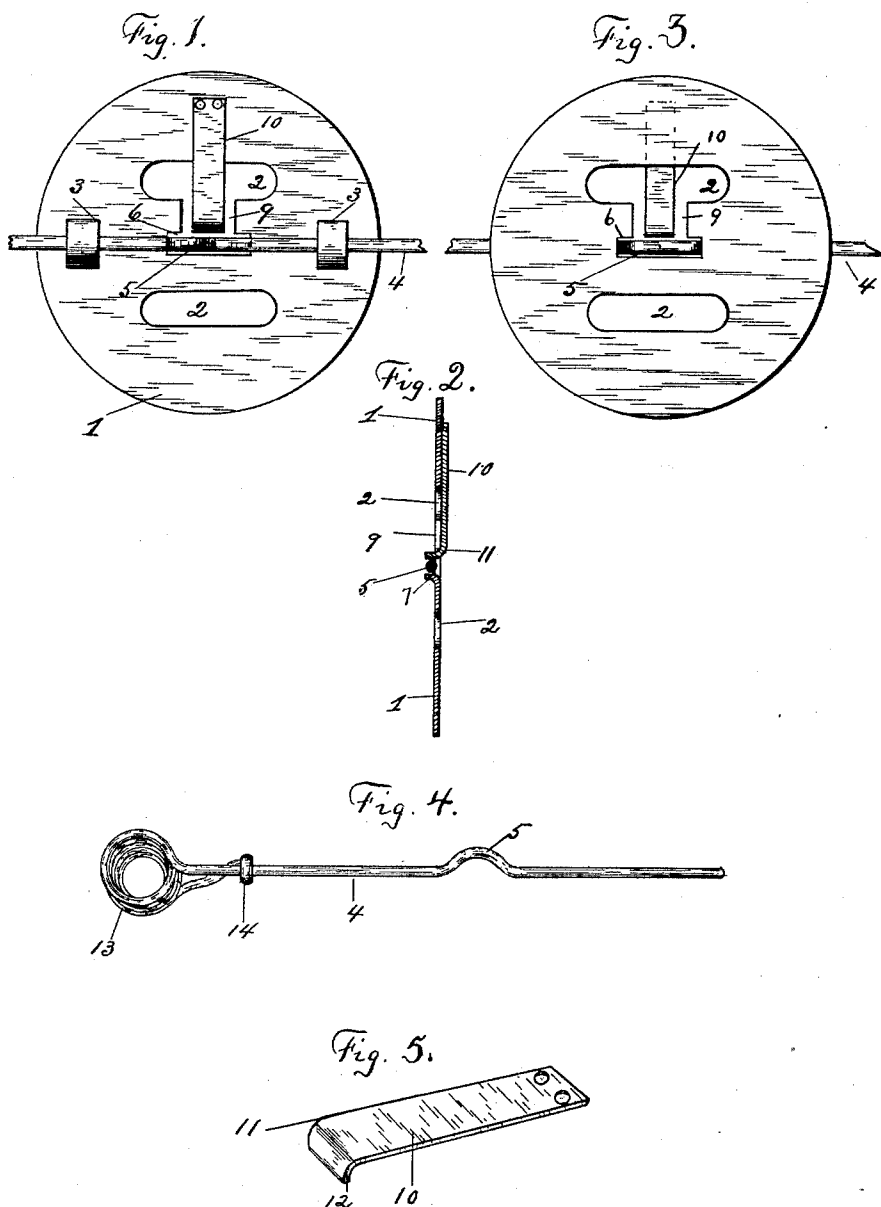


(No Model.)

W. A. & A. E. KEMP.
DAMPER.

No. 468,284.

Patented Feb. 2, 1892.



WITNESSES:

Chas. E. Riordan,
Robert Moursse;

INVENTORS:

Wm. A. Kemp & Albert E. Kemp.
BY
Arthur L. Monnell.
Att. ATTORNEY.

UNITED STATES PATENT OFFICE.

WILLIAM A. KEMP AND ALBERT E. KEMP, OF TORONTO, CANADA, ASSIGNORS
TO THE KEMP MANUFACTURING COMPANY, OF SAME PLACE.

DAMPER.

SPECIFICATION forming part of Letters Patent No. 468,284, dated February 2, 1892.

Application filed January 19, 1891. Serial No. 378,191. (No model.)

To all whom it may concern:

Be it known that we, WILLIAM ARTHUR KEMP and ALBERT E. KEMP, manufacturers, of the city of Toronto, in the county of York, in the Province of Ontario, Canada, have invented certain new and useful Improvements in Dampers; and we hereby declare that the following is a clear, full, and exact description of the same.

The invention relates to dampers, and has for its object to provide a device of the character which can be cheaply and easily manufactured, and one in which, although the damper-rod is formed separate from the damper-plate, yet said damper-rod may be readily adjusted thereto and securely held in position, so that the turning of the damper-plate is insured.

The invention consists of the improved construction and combination of parts, as hereinafter more fully set forth and described in the specification and drawings.

In the accompanying drawings, Figure 1 is a plan view of a damper embodying our invention. Fig. 2 is a cross-section on the line *a a*, Fig. 1. Fig. 3 is an inverted plan of Fig. 1. Fig. 4 is a detail view of the damper-rod, and Fig. 5 is a detail view of the spring-plate.

Like numerals of reference refer to like parts throughout the specification and drawings.

Referring to the drawings, the numeral 1 indicates the damper-plate made to the requisite size and shape and having apertures 2 and spindle-sockets 3 formed in its body. Through the spindle-socket 3 passes the damper-rod 4, consisting of a bar of metal having formed in its body a projecting piece 5, which is sprung into a central elongated slot 6, stamped out or otherwise formed in the body of the damper. Connecting one of the apertures 2 and the slot 6 is an opening 9, and secured to the upper side of the damper 1, in alignment with the opening 9, is an L-shaped spring-plate 10, the angle 11 of which is on a line with the edge of the slot 6. By working the damper-rod 4 through the spin-

dle-sockets 3 and bringing the projecting piece 5 on the spring-plate 10 the said damper-rod can be easily sprung into the slot 6, and when sprung the plate 10 returns to its normal position, and the downwardly-extending piece 12 serves as an abutment for the projecting piece 5 of the damper-rod. The opposite bordering edge of the slot is also provided with a downwardly-projecting flange 7, forming the other bearing-wall for the curved projecting piece of the damper-rod. The spring-plate 10, it will be noticed, serves two functions, viz: It serves as a means for readily admitting the projecting piece 5 to its slot, and, furthermore, acts as one of the bearing sides for said projecting piece. The damper-rod 4 is provided with a spring-handle 13 and a spring-washer 14 pressing the stove-pipe tightly against the damper.

Having thus fully described our invention, what we claim as new, and desire to secure by Letters Patent, is—

1. The combination of a damper-plate provided with a central elongated slot having a branch slot extending at an angle therefrom, a spring-plate secured to the upper side of the damper-plate in alignment with the branch slot, having its free end on a line with the bordering edge of the central elongated slot, and a damper-rod working in bearings extending from the damper-plate and provided with a downwardly-bent portion registering with said central elongated slot of the damper-plate, substantially as set forth.

2. A damper 1, provided with spindle-sockets 3 and a central elongated slot 6, a damper-rod passing through the said sockets and having a projecting piece 5 sprung into the slot 6, and a spring-plate 10, secured to the upper side of the damper 1 and having a downwardly-extending side 12, substantially as and for the purpose set forth.

3. The combination of a damper-plate provided with a central elongated slot and a flange depending from one of the bordering edges of the slot, said slot also having a branch slot extending at an angle therefrom,

a spring-plate secured to the side of the damper-plate in alignment with the branch slot, having its free end on a line with the bordering edge of the central elongated slot
5 and bent downward at right angles, and a damper-rod working in bearings extending from the damper-plate and provided with a downwardly-extending portion registering with said central elongated slot of the damper-plate, substantially as set forth.

Dated this 23d day of December, 1890.

W. A. KEMP.

A. E. KEMP.

In presence of—

W. T. TOWNE,

J. W. MAYOR.