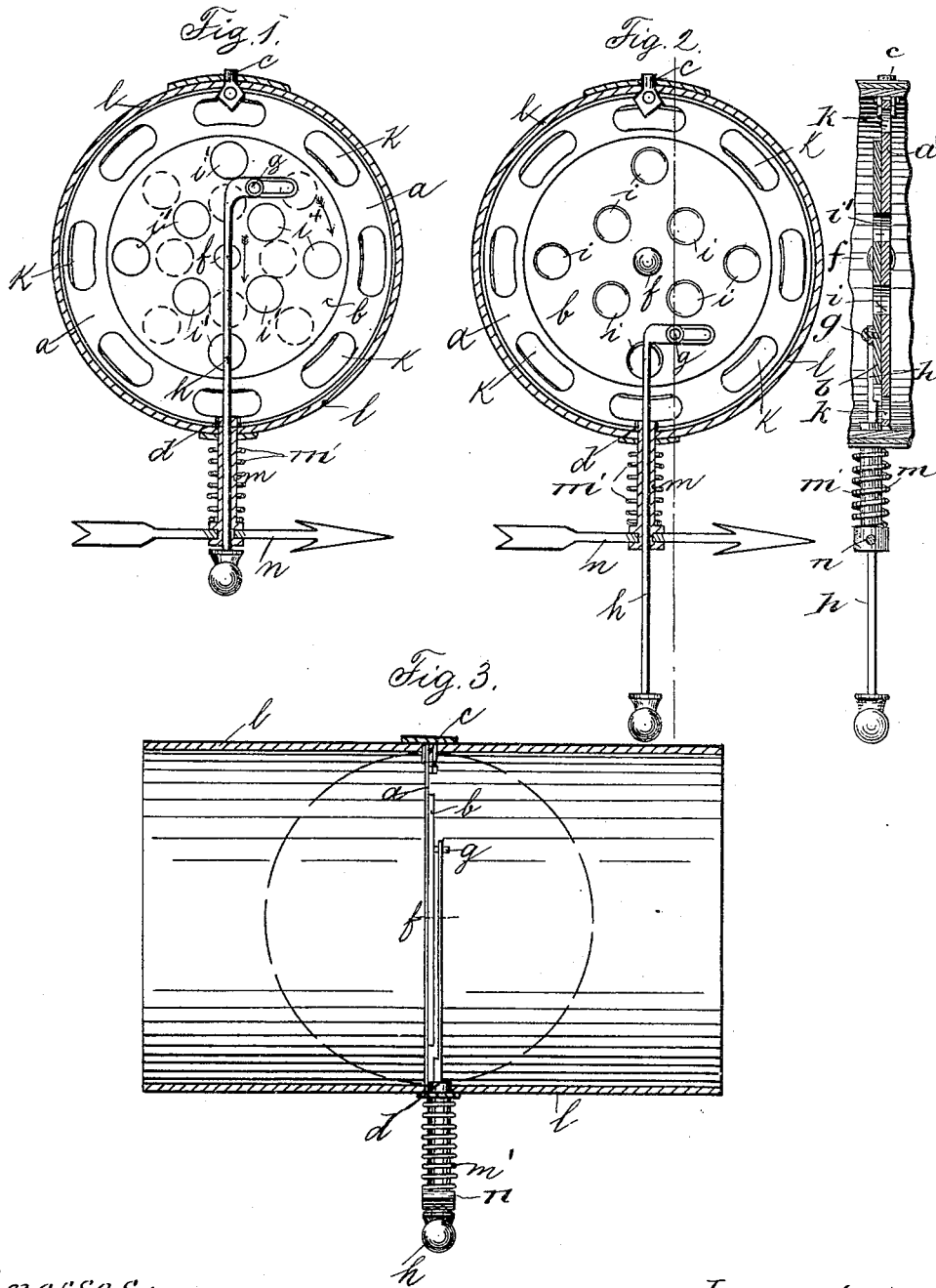


(No Model.)

A. FLECHTNER.  
DAMPER FOR HOUSEHOLD STOVES.

No. 493,580.

Patented Mar. 14, 1893.



Witnesses:  
M. Bantze.  
E. H. Hopkins.

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# UNITED STATES PATENT OFFICE.

ALBIN FLECHTNER, OF METZ, GERMANY.

## DAMPER FOR HOUSEHOLD-STOVES.

SPECIFICATION forming part of Letters Patent No. 493,580, dated March 14, 1893.

Application filed October 28, 1891. Serial No. 410,056. (No model.)

*To all whom it may concern:*

Be it known that I, ALBIN FLECHTNER, a subject of the German Emperor, residing at Metz, in the German Empire, have invented a certain new and Improved Damper for Household-Stoves, of which the following is a full, clear, and exact description.

My invention relates to a damper or draft regulator for household stoves, and its object is to provide a device, by means of which, the temperature of a room may be more sensitively regulated than heretofore, without however allowing the carbonic oxide, constantly being generated, to escape into the room. The device, by means of which I attain this object consists mainly of a throttle disk pivoted in the chimney or flue and having interior perforations which may be covered or uncovered by means of a rotary disk pivotally arranged on the throttle disk; in addition to this the latter is provided with an outer circle of perforations, which are permanently open to allow the carbonic oxide to escape at all times.

In order to make this description more easily intelligible, I refer to the accompanying drawings, in which similar letters denote similar parts throughout the several views.

Figure 1 shows the damper in elevation when in a closed position. Fig. 2 is the same elevation with the damper open. Fig. 3 is a sectional elevation of a flue with a damper arranged therein.

*a* and *b* are two disks the former being pivoted in the chimney at *c d*, while the latter is centrally pivoted to the former at *f*. The disk *b* is provided with central perforations *i'* arranged to correspond with those *i* of disk *a* which has, in addition to the holes *i*, an outer ring of perforations *k* which are permanently opened. The disk *b* is further provided with a pin *g* engaging in a slot arranged in a short arm of the rod *h*. The disk *b* may be partially revolved on disk *a* by pulling the rod *h* down or out, as shown in Fig. 2. The rod *h*, is guided in a sleeve *m*, which is attached to the trunnion *d* and advantageously provided with an arrow *n* at its lower end, serving as handle and at the same time pointer showing

the position of the throttle disks *a. b*. A spring *m'* is arranged round the sleeve *m* and presses at one end against the exterior of the flue or chimney and at the other end against the arrow *n* or collar of the same. This spring *m'* has the purpose of retaining the damper *a b* in any position, into which it may be placed, by holding it more tightly against the interior of the flue or chimney. By revolving or adjusting the disk *b* on disk *a*, the perforations may be made to correspond as shown in Fig. 2, when the draft will be increased. The position of the throttle disk with regard to the flue can be varied, by adjusting the same on its pivots *c, d*. When the throttle is closed in the chimney, the carbonic oxide can escape through the outer circle of perforations *k*, while the draft may be more sensitively regulated by adjusting the disk *b* or disk *a* by means of rod *h*.

My improved damper, besides effecting considerable saving in fuel, permits of more sensitive regulation of the draft and consequently a more advantageous generation of heat.

Having now particularly described and ascertained the nature of my invention and manner of performing the same, what I claim is—

The combination of a disk *a* pivoted at *c* and *d* in the chimney or flue, and having outer ring of perforations *k*, inner perforations *i* and handle *n* mounted in sleeve *m* of the hollow trunnion *d*, and having retaining spring *m'*, with a disk *b*, centrally pivoted to and smaller than said disk *a*, said disk *b* having perforations *i'* corresponding to the perforations *i* of disk *a*, having further pin *g* and operating rod *h* with rectangular slotted arm engaging pin *g*, said rod *h* being guided by the hollow trunnion *d* and sleeve *m*, in the manner and for the purpose substantially as described.

In witness whereof I hereunto set my hand in presence of two witnesses.

ALBIN FLECHTNER.

Witnesses:

A. MAX HALDRICH,  
— BALLING.