(No Model.)

E. D. NELLIS.

MEANS FOR OPERATING STOVE DAMPERS.

No. 516,875. Patented Mar. 20, 1894.

Fig. 1.

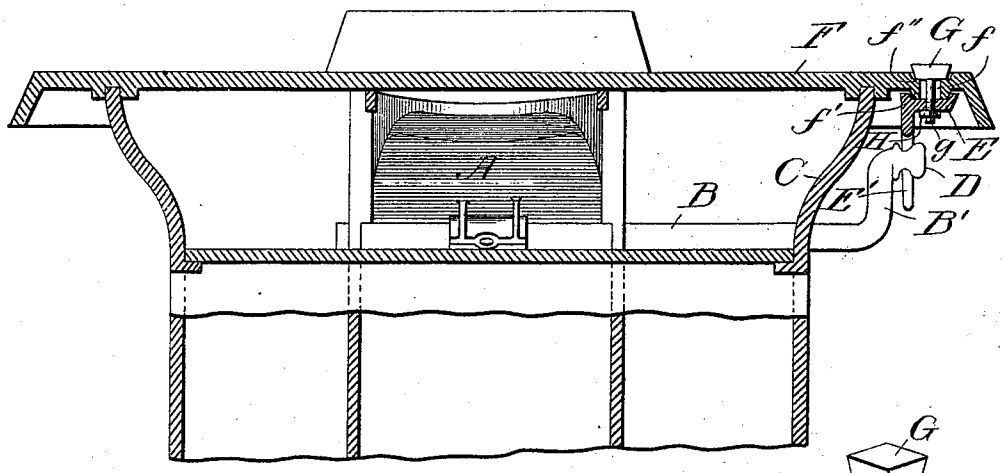
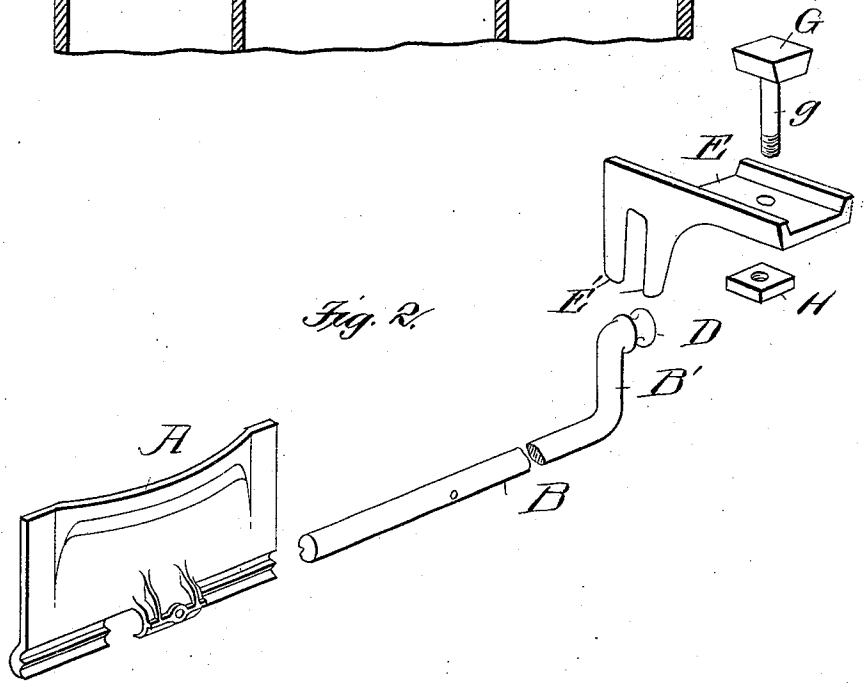


Fig. 2.



Witnesses:
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THE NATIONAL LITHOGRAPHING COMPANY,
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UNITED STATES PATENT OFFICE.

EMERY D. NELLIS, OF ST. LOUIS, MISSOURI, ASSIGNOR TO THE BRIDGE & BEACH MANUFACTURING COMPANY, OF SAME PLACE.

MEANS FOR OPERATING STOVE-DAMPERS.

SPECIFICATION forming part of Letters Patent No. 516,875, dated March 20, 1894.

Application filed December 2, 1893. Serial No. 492,588. (No model.)

To all whom it may concern:

Be it known that I, EMERY D. NELLIS, a citizen of the United States, residing in the city of St. Louis, State of Missouri, have invented a certain new and useful Improvement in Means for Operating Stove-Dampers, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming a part of this specification, wherein like letters of reference refer to like parts wherever they occur, and in which—

Figure 1 is a vertical cross-sectional view of a stove provided with my improved damper operating attachment, and Fig. 2 represents, in detail, the damper and its several associate parts forming my damper-operating attachment.

My invention relates to a new and useful improvement in the means for operating a draft regulator or damper, as it is called, for stoves, and consists in the improved form of slide block and its connection with the damper-operating rod, as will hereinafter be described and afterward pointed out in the claim.

In the drawings, A indicates the damper plate, and B, the operating rod to which said plate is secured, said parts being shown in this instance, for purposes of illustration, the same as are shown and described in United States Letters-Patent granted to me on March 8, 1892, No. 470,439. The end B′ of the operating rod B, preferably projects through the framing plate C of the stove, to one side thereof, where it is bent at an angle, and has its extreme end provided with a button or bearing D, with which bearing the slide block E engages. This slide block E is mounted in ways formed on the under side of the top plate F of the stove, and is provided with a bifurcated extension, or two downwardly-extending prongs E′ which receive between them the end D of the operating rod. The recess thus formed by these prongs E′ is of such length as to permit the end B′ of the rod B to have full swing and allow the bearing D to slide up and down therein to compensate for the different horizontal planes it occupies in moving in an arc of a circle described from its axis B. It will be understood in this connection that the bearing D describes only about a quarter of a circle, and at no time does it occupy a right-angular position with relation to its axis and the prongs E′, in which instance it would be impossible to move it through the medium of the sliding block; but said bearing and bent portion B′ are so arranged relative to the damper-plate A that their swinging movement to move the damper to either of its extreme positions might be said to be included in a V, the apex of which would be their pivotal axis. The top plate F of the stove is slotted as at *f* in the line of the travel of the bearing D, said slot being located between the guide-ways *f′* on the under side of the top plate, on which guide-ways the block E slides. At the upper edge of the slot *f*, on each side, are shoulders *f″* forming a seat for a sliding button G. Projecting from the button G downwardly through the slot and through an opening *e* in the block E, is an extension *g*, threaded on its lower end, where it receives a nut H bearing on the under side of the block E. The sliding block E is in this way held to its seat on the under side of the top plate, and means are thus afforded to operate the same from the top of the stove through the medium of the button G, which is very convenient to operators, and the button G at the same time offers a ready indicator to the position of the damper plate, as to whether the same is "open" or "closed."

Having thus described my invention, what I claim, and desire to secure by Letters Patent, is—

The combination with the top-plate of a stove having a slot formed therein, of guide ways on each side of the slot beneath the top-plate, a slide block arranged beneath the top-plate and adapted to slide on the guide ways, prongs extending downwardly from said slide block, a button mounted above the top-plate and provided with a threaded extension which extends downwardly through the slide block, a nut on the lower extremity of the threaded extension, which impinges

against the slide block and holds the same in position, and a damper rod which has a bearing located to one side of its axis, through the medium of which the rod is rotated by the horizontal movement of the slide block, substantially as described.

In testimony whereof I hereunto affix my signature, in presence of two witnesses, this 27th day of November, 1893.

EMERY D. NELLIS.

Witnesses:
F. R. CORNWALL,
HUGH K. WAGNER.