

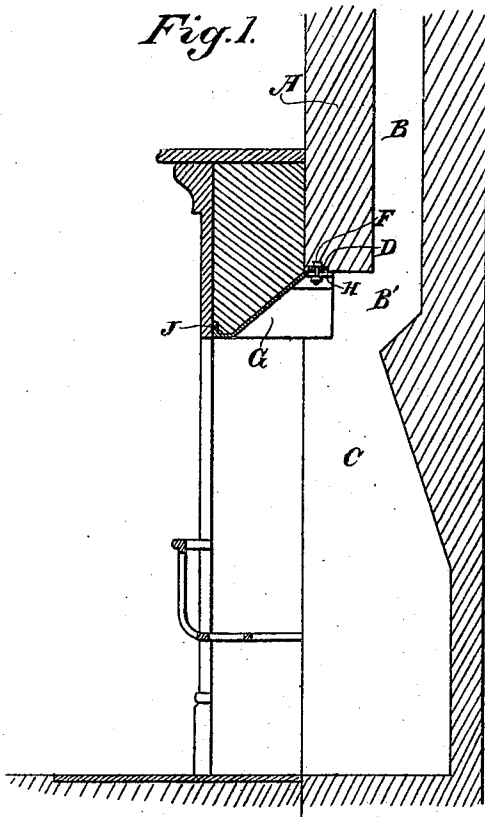
(No Model.)

L. E. CLAWSON.  
CHIMNEY.

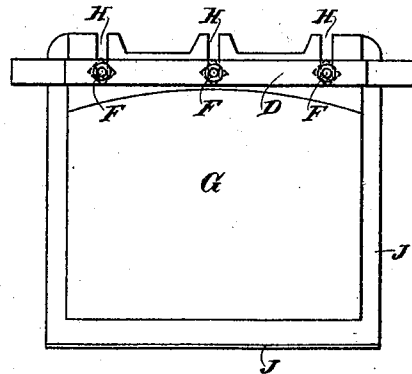
No. 502,901.

Patented Aug. 8, 1893.

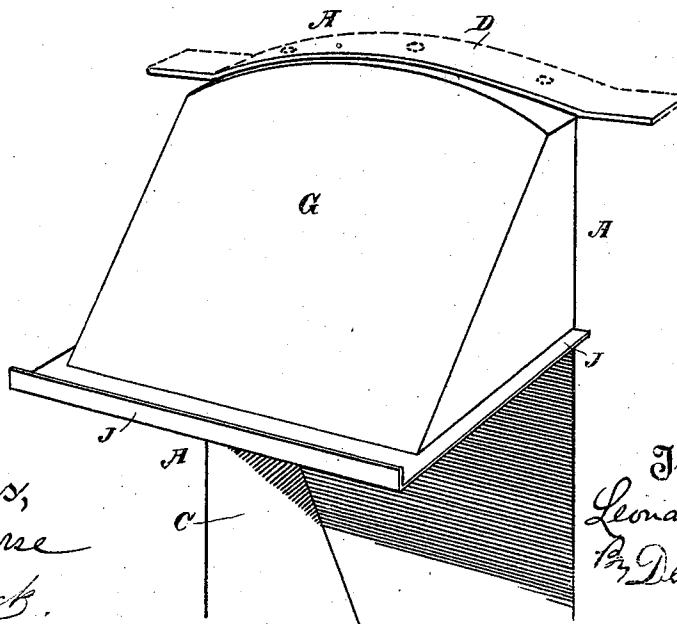
*Fig. 1.*



*Fig. 2.*



*Fig. 3.*



Witnesses,  
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# UNITED STATES PATENT OFFICE.

LEONARD E. CLAWSON, OF SAN FRANCISCO, CALIFORNIA.

## CHIMNEY.

SPECIFICATION forming part of Letters Patent No. 502,901, dated August 8, 1893.

Application filed April 17, 1893. Serial No. 470,724. (No model.)

*To all whom it may concern:*

Be it known that I, LEONARD E. CLAWSON, a citizen of the United States, residing in the city and county of San Francisco, State of California, have invented an Improvement in Chimneys; and I hereby declare the following to be a full, clear, and exact description of the same.

My invention relates to improvements in chimneys and the connection between the chimney flue and the fireplace.

It consists in certain details of construction which will be more fully explained by reference to the accompanying drawings, in which—

Figure 1 is a vertical section through a fireplace, showing the application of my device. Fig. 2 is a plan view of the shell and arch bar. Fig. 3 is a perspective view showing the relative position of the device to the chimney and fireplace.

In the ordinary construction of chimneys an arched bar is fitted into the top of the opening between the fireplace and the chimney flue. It is customary to cover the outside of the chimney with furring over which the lath and plaster are placed, and the mantel is set up against the chimney as closely as possible. In time, however, there is always danger that these parts will become separated so as to leave a crack or open space through which fire may reach the furring and endanger the house. My invention is designed to overcome this difficulty, and to provide a bond and connection which will prevent any separation or opening between the chimney and the mantel at this point.

A is a chimney and B is the flue.

C represents the fireplace opening which connects at the top with the chimney flue B by a passage B'. Above the passage B' is fixed the arch bar D which is secured in the brick work, and which has bolts F projecting down through it and extending below the lower face of the bar.

G is a shell which may be made of cast or wrought iron, terra cotta or other material, and it has slots H made in its upper rear edge as shown. This edge of the shell has the same curvature as the lower side of the arch bar and fits snugly against it. From the arch bar, the shell inclines downwardly and outwardly as shown, and has at the front

and sides, the ledges J upon which the filling or brick work between the chimney and the mantel is supported. By means of the slots H made in the upper rear edge of the shell, it is fitted over the bolts F which project down from the arch bar, and is secured in position by means of nuts screwing upon the lower ends of the bolts so as to make a perfectly strong bond and connection between the shell and the arch bar. The slots allow the shell to be adjusted forward or back to insure a good joint. The shell extends the full width of the top of the opening, inclining downwardly and outwardly at the front, and having vertical sides as shown, and upon and above this is built the setting of the mantel which should not be less than nine inches of brick work laid solid and bonded to the brick chimney with iron spikes or wedges over three courses, so that it is impossible for it to settle away from the chimney.

The metallic shell or casing G forms a perfect protection and bond between the chimney and the mantel, so that it is impossible for them to separate or leave any opening through which fire can pass. By reason of its upward inclination from front to rear, it acts as a guide to the products of combustion, insuring the passage of all these products into the chimney, instead of dividing them, and causing smoke to pass out into the room, as in the ordinary construction.

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

In a chimney, the flue, fireplace opening, and connection with the flue, the arched bar set in the top of the flue connection having bolts projecting downwardly therefrom, an arched and inclined shell fitting against the lower side of the arch bar having slots made in it whereby it is adjustable upon the bolts, and nuts whereby it is secured in place, said shell forming a bond and connection between the chimney and mantel and preventing the separation of the two, substantially as herein described.

In witness whereof I have hereunto set my hand.

LEONARD E. CLAWSON.

Witnesses:

S. H. NOURSE,  
WM. F. BOOTH.