W. DOYLE.

Stove-Legs.

No. 145,932. Patented Dec. 30, 1873.

Fig. 1.

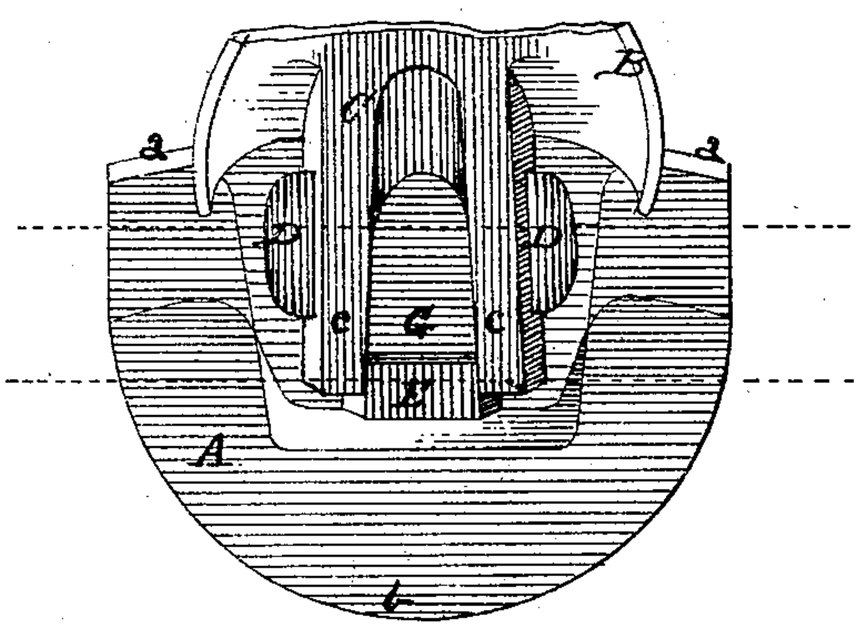

Fig. 2.

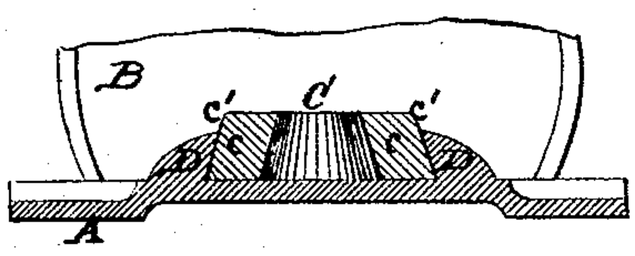

Fig. 3.

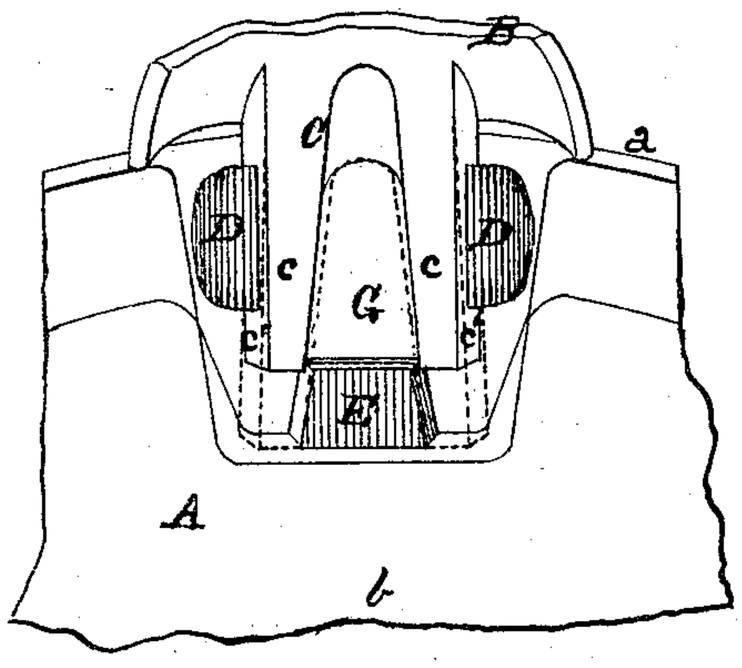

Fig. 4.

Witnesses. James Wright
Edward N Doyle

Wm Doyle
Inventor.

UNITED STATES PATENT OFFICE.

WILLIAM DOYLE, OF ALBANY, N. Y.

IMPROVEMENT IN STOVE-LEGS.

Specification forming part of Letters Patent No. **145,932**, dated December 30, 1873; application filed August 11, 1873.

To all whom it may concern:

Be it known that I, WILLIAM DOYLE, of the city and county of Albany, State of New York, have invented certain new and useful Improvements in the Mode of Securing Stove-Legs to the Base or Bottom of Stoves; and I do hereby declare that the following is a description thereof, reference being had to the accompanying drawings forming a part of this specification, in which—

Figure 1 represents a vertical view of a section of the bottom plate of a stove, and the leg in place, illustrating the invention. Fig. 2 is a cross-sectional view taken at line No. 1 in Fig. 1. Fig. 3 is a cross-sectional view taken at line No. 2 in Fig. 1. Fig. 4 is a vertical view, illustrating the leg in position between the side dovetails previous to its being thrown farther back to its proper seat with the bottom plate.

To enable others skilled in the art to make and use my invention, I will proceed to describe it in reference to the drawings and the letters of reference marked thereon, the same letters indicating like parts.

In the drawings, A represents a section of the bottom of a stove. *a* is the outer edge of the same. *b* is a portion of the base at a distance from the said edge, and more highly heated than the edge *a*. B is the leg—a section. C is the usual shank of the leg entering between the lugs D D, forming the dovetailed outer pieces, all of which are old, and require no particular description.

It is well known that in many cases the legs of stoves have been moved from their places, and, dropping out from their dovetailed seats, have caused the stove to upset, and thereby occasioned serious accidents. It is also well known that when the stove is first set up, its parts being cold, and the shank of the leg has been made to enter between the usual lugs D D tightly, when the bottom of the stove has become heated, the portion of the plate bearing the said lugs will become expanded, and the distance between the said lugs will be slightly increased, so as to loosen from the shank C, and readily permit the leg to be removed or thrown out of place.

My invention is designed to prevent the leg being readily loosened at its shank by the expansion of the bottom plate, and to cause the said shank to be firmly locked in place when cold, and also to cause the locking to be made more firm and reliable when the said bottom plate is heated. To effect this I make the shank C bifurcated with its two portions, *c c*, having beveled outer edges c^1 c^1, as shown in Figs. 2 and 3, to correspond with the inner edges of the lugs D D, between which the said bifurcated shank is to pass. I also make solid with the bottom plate A, and at a distance from the outer edge *a* of the said plate and toward the portion *b*, the key-lug E, the forward end of which is of a width sufficient to enter the space G between the forks *c c* of the shank, as shown by full lines in Fig. 4. When the said bifurcated shank is driven back between the lug D, the said key-lug E will enter the space G to crowd the forks *c c* outward, and spread them as they are advanced, as indicated by dotted lines, Fig. 4. The inner surfaces of the forks *c c* are also inclined about parallel with the outer edges c^1 c^1 of the same, and the outer edges *e e* of the key-lug are inclined to correspond with the inner inclines c^2 c^2 of the forks, as shown. By these inclines c^2 c^2 corresponding with the inclines c^1 c^1 of the forks *c c*, the said forks are rendered capable of being slightly deflected or spread, as shown in Fig. 4; and by the inclines *e e* of the key-lug E operating with the inclines c^2 c^2 of the forks of the shank, the said forks can, at their ends, slightly ride up on the inclines *e e*, to cause the shank to bind tighter with the lugs D D at the sides of said shank.

In using this invention, the shank C of the leg is slipped between the lugs D D as far back as possible, when the key-lug will enter the space E with its end. The leg is then driven back with a hammer or other instrument, when the shank will be forced yet farther into the space between the forks of the shank, and spread the same so as to tighten between the lugs D D, when the leg will be firmly locked.

When a fire is made in the stove, and the bottom plate has become heated, the said plate will naturally expand, and the outer edge *a*, being of lower temperature than the portion *b* farther in, will have a slightly less expansion, and the key-lug E, being nigher toward the portion *b* than the lugs D D, will become more

heated than the said lugs, and will consequently expand more than the space between the said lugs, and in such greater expansion the key-lug will cause a slight increase of the spreading of the forks *c c* of the shank, to make the said shank to bind tighter between the lugs D D, so that the leg will be made more secure when the stove is hot than when cold.

This invention is applicable to all classes of stoves, heaters, or ranges standing on legs, as the bottom plate can be modified in its form to adapt this invention to any plates; and, while it does not in the least increase the cost, of the article, it insures the perfect security of the leg in its place.

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

1. In combination with a bifurcated shank of a stove-leg, receiving a key-lug between its forks to spread the same toward the side holding-lugs, the surface edges *c c*, inclining toward each other from the top surfaces of the shank to the lower surfaces of the same, substantially as and for the purpose set forth.

2. The bifurcated shank having the outer edges of its forks inclined to correspond with the inclines of the said lugs, and their inner edges inclined parallel with said outer inclines, substantially as and for the purpose set forth.

3. The key-lug made solid with the bottom plate of the stove, in combination with the side lugs or dovetails receiving the shank of the stove-leg, substantially as and for the purpose set forth.

4. The bifurcated shank made solid with the leg, and the side lugs made solid with the bottom plate and receiving the shank, in combination with the key-lug, also made solid with the bottom plate, and capable of entering the space between the said bifurcated shank, substantially as and for the purpose set forth.

WILLIAM DOYLE.

Witnesses:

JAMES WRIGHT,

EDWARD H. DOYLE.