

(No Model.)

W. I. GONG.
LAUNDRY STOVE.

No. 551,373.

Patented Dec. 17, 1895.

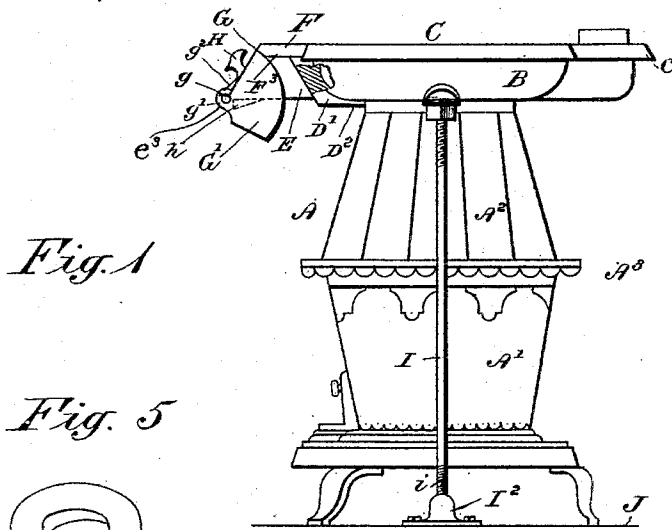


Fig. 5

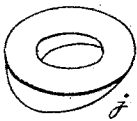


Fig. 6

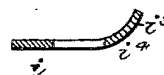


Fig. 2

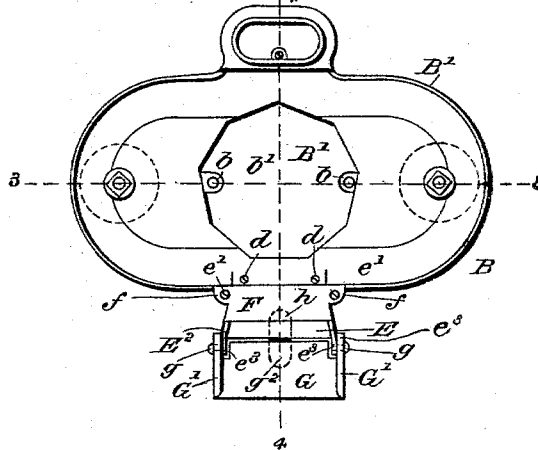


Fig. 3

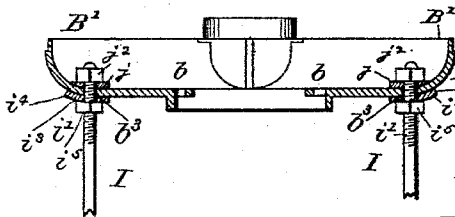


Fig. 4

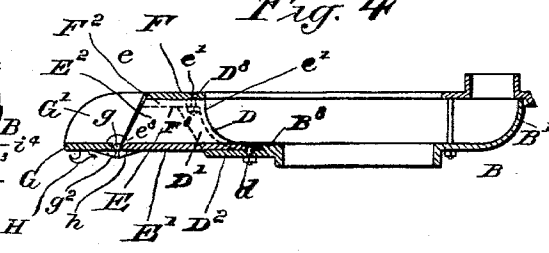
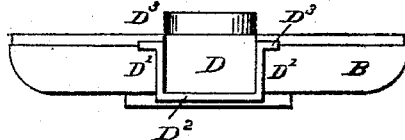


Fig. 7



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UNITED STATES PATENT OFFICE.

WONG I. GONG, OF NEW YORK, N. Y.

LAUNDRY-STOVE.

SPECIFICATION forming part of Letters Patent No. 551,373, dated December 17, 1895.

Application filed February 6, 1895. Serial No. 537,432. (No model.)

To all whom it may concern:

Be it known that I, WONG I. GONG, a subject of the Emperor of China, residing in the city and county of New York, in the State of New York, have invented a certain new and useful Improvement in Laundry-Stoves, of which the following is a specification.

The invention relates more particularly to the class of stoves in which a detachable casing is provided upon the upper part of the fire-chamber and rests on the top of the portion against which the sad-irons are placed when they are to be heated; and the invention has for its object to provide improved means for permitting the coal to be fed into the stove through said upper casing so as not to interfere with the sad-irons which are being heated. By this means also I am enabled to do away with the aperture and door that has been usually provided in the upper part of this class of stoves, the disadvantage of which has been that when the door was opened to supply coal to the stove the hot coals within the stove were liable to fall out. My invention allows the stove to be filled up higher with coal.

A further object of the invention is to securely hold the upper casing upon the stove independently of the usual means of fastening the casing on the stove, so that if said means should be burned out or otherwise injured the casing would not fall from the stove when boilers, &c., are being removed. By this means I afford increased protection to the operator.

The invention also consists in the novel details of improvement and the combination of parts that will be more fully hereinafter set forth and then pointed out in the claims.

Reference is to be had to the accompanying drawings, forming part hereof, wherein—

Figure 1 is a side elevation, partly in section, of a laundry-stove provided with my improvements. Fig. 2 is a plan view thereof with the top of the upper casing removed. Fig. 3 is a cross-section on the plane of the line 3 3 in Fig. 2. Fig. 4 is a cross-section at right angles to Fig. 3 on the plane of the line 4 4 in Fig. 2. Fig. 5 is a perspective view of a washer. Fig. 6 is a sectional view of another washer, which I employ in securing the upper casing of the stove against its being

inadvertently removed when using the stove; and Fig. 7 is a front view of the upper casing with the chute removed.

In the accompanying drawings, in which similar letters indicate corresponding parts in the several views, the letter A indicates the body of a laundry-stove of usual or any desired construction, and B is a hollow casing, sometimes termed the "bowl," located upon the top of said stove-body A. In this class of stoves the lower portion A' is usually used as the fire-pot, and the upper portion A² has polygonal sides against which the bottoms of the sad-irons rest in order to heat them, the ledge A³ between the parts A' A² of the stove serving to support said sad-irons.

The casing B is preferably cast in suitable shape, having upturned walls B' upon which a cover C rests, being suitably held thereon from movement by overlapping sides c, or hanging lip, or in any other desired manner. The casing B has a central opening b', which fits over the open top of the part A² of the stove A, and in this class of stoves said casing is usually provided with lugs b that receive screws or bolts to fasten the casing upon the stove A. I preferably so arrange the connection b' of the casing B on its stove-chamber that the casing can fit stoves of different design or shape, so that one casing can be changed from one stove to another, which is done for convenience in use.

One side of the casing B according to my invention is cut away at D, forming an opening for the entrance of fuel, and at the edges of said opening are cast integral with said casing vertical ribs D' and a horizontal web D², which projects outwardly from the base portion B³ of the casing B. At the upper part of the vertical webs D' at the junction with the said walls of the casing B³ are horizontal lugs or webs D³, also cast integral with the casing B. These webs or lugs serve to strengthen the sides of the casing B where the opening D is formed. E is a chute made removable and adapted to be attached to the casing B, contiguous to the opening D. This chute E is formed with a horizontal plate E', having vertical sides E², the chute being preferably inwardly inclined, as shown in Fig. 2. At the upper part of the sides E² are lugs or ears e, which are adapted to rest upon the lugs or

ears D^3 of the casing D , bolts or screws e' passing through said ears, serving to hold the parts together. The inner edges of the sides E^2 of the chute E are curved, as at e' , to correspond to the curve B' of the walls of the casing B , the curve e' of the walls of the chute E resting against the corresponding wall B' of the casing B , as indicated in Fig. 4.

The chute E is adapted to extend over and rest upon the web D^2 of the casing B , and may be bolted thereto by screws or bolts d , as shown in Figs. 2 and 4, said plates passing through the inner horizontal portion of said chute and the web D^2 .

F is a strengthening-plate placed across the top of the chute E and resting against the sides of the casing B at the opening D , and extending across said opening, as shown in Fig. 2. The screws or bolts e' pass through said plate F or through ears f thereon, and through the ears e of the chute, and through the lugs D^2 on the casing B , thereby binding all the parts together in a firm structure. The plate F also has depending webs F^3 at its ends which lap over the upper edges of the walls E' of the chute E and serve to prevent side strain on the walls of the chute, as indicated by dotted lines in Fig. 4. When the casing B should become broken or burned out the chute E can be readily removed therefrom and attached to a new casing, the parts all being made interchangeable for that purpose.

The outer open end of the chute E is shown provided with a hinged door G , which is adapted to swing up in front of the open end of said chute, as shown in Fig. 1, and to swing down parallel therewith, as shown in Fig. 4, to permit the entrance of fuel. The door G has side wings or webs G' , which serve to provide substantial extensions of the chute E when the door is down, as in Fig. 4, to guide the fuel as it is being inserted into the stove. The chute E has outwardly-extending lugs e^3 , which receive pivots g that pass through lugs g' on the door G , whereby the latter is pivoted to the chute. On the bottom of the chute E , at its outer end, is a stop-piece h , adapted to be engaged by a corresponding stop g^2 on the door G when the door is lowered, as shown in Fig. 4, whereby said door is held horizontally when it is open, as shown in said figure. When the door G is closed it will rest against the open end of the chute E and against the cross-plate F , thereby making a tight fit, and the sides $G' G'$ will hang down passing outside of the wall of the chute, as shown in Fig. 1; but when the door G is open the walls G' will be raised to form a continuation of the chute, as shown in Fig. 4. H is a suitable hook or knob on the front of the door G , by which the latter may be operated.

By means of my improvements above described, I am enabled to feed fuel into the stove through the casing B without disturbing the sad-irons that may be resting against the sides A^2 of the stove, and at the same

time as the fuel is fed to the stove above the fire-pot the stove may be filled with fuel to the top, and there is no danger of hot coals falling out upon the floor, as has been the case in those stoves of the class to which my invention relates, wherein the door for the entrance of fuel was provided in the upper part A^2 of the stove. In this class of stoves the fastenings at b between the stove-casing and the removable casing B are liable to burn out, in which event the casing B , very often when large and heavy boilers are being handled, will be so loose as to cause the boiler to fall and scatter the hot water and clothing, thereby endangering the attendant and injuring the clothing. For this purpose I provide independent holding means extending from the casing B to the floor, as shown in Figs. 1, 2, and 3. For this purpose I have shown rods I passing upwardly along the sides of the stove but outside thereof, which rods may be suitably secured to the floor J . I have shown the adjustable means for this purpose, consisting of a plate I^2 of suitable construction, preferably having a threaded aperture to receive the threaded end i of the rod I , whereby the latter may be adjusted vertically in accordance with the height of the casing B from the floor. At their upper ends the rods I are also screw-threaded at i' , and pass through apertures b^3 in the bottom of the casing B . (See Fig. 3.) i^3 are washers which are shaped to correspond to the under surface of the casing B , being shown curved at i^4 , to correspond to the walls B' of said casing, so as to make a snug fit against said walls, to exclude air at those points.

Upon the rods I are nuts i^5 , adapted to bear against the washer i^3 , upon which washers the casing B rests, the position of the nuts i^5 upon the rods I serving to regulate the vertical adjustment of the casing B relatively to the stove A . Within the casing B and upon the rods I are suitably-shaped washers j having their lower faces curved or bent to correspond to the shape of the wall B' of the casing B , and upon the rods I are nuts j^2 which serve to hold the casing B rigidly upon the rods I . The apertures b^3 in the casing B are preferably placed as near the outer edges of the casing as possible, so as to leave room between the rods I for the stove A . When the casing B is securely clamped upon the rods I , as shown in Fig. 3, and the latter are secured to the floor, the casing B is substantially supported independently of the stove so that if the connections at b between said stove and the casing should burn out, said casing will remain independently supported. By this means the moving of heavy boilers on and off the casing B will not cause the casing to slip from the stove and thus create damage, as has been the case where the casing B in stoves heretofore in use has merely been connected with a stove.

I do not limit my invention to the precise details of construction herein shown, as they

may be varied without departing from the spirit of my invention.

Having now particularly described my invention, what I claim is—

5 1. The stove body having the fire pot A', the polygonal upper portion A², adapted to heat flat-irons, and the ledge A³ adapted to support such irons in combination with a casing B upon said stove, having an opening D
10 at one side, vertical ribs D' at or near the edges of said opening, a chute secured at said opening, a cross plate F extending across said opening and connected with the casing B, such cross plate having webs F³ engaging the vertical
15 sides, and a door to close the open end of said chute, substantially as described.

2. The combination of a stove with a casing B upon it, said casing having an opening D at
20 one side, vertical ribs D' at or near the edges of said opening, and lugs D³, said webs and lugs being cast integral with said casing, and a web D² extending outwardly beneath said opening, a chute having a bottom plate E and
25 up-turned sides E² beneath to be connected with said web as at d, said chute having lugs e adapted for connection with the lugs D³, a cross plate F adapted to pass across the top of said chute, and a cover G hinged to said chute,
30 substantially as herein specified.

3. The combination of a stove with a casing upon it having a side opening D, a chute adapted to be attached to said casing at said opening, a plate F to pass over said chute, and adapted

to be attached to said casing, said cover having depending webs F² adapted to lap over 35 the sides of said chute, and a door hinged to said chute, and having side webs G' to form a continuation of said chute when the door is open, substantially as described.

4. The combination of a stove with a casing 40 upon it, said casing having a side opening D, a chute adapted to be attached to said casing at said opening, a door hinged to said casing, and having side webs G', and a projection g², the chute also having a projection h which 45 meets the projection g² when the door is open, and a cross plate F extending across said chute, said door being adapted when closed to engage said plate to make a close fit over said chute, substantially as herein specified. 50

5. The combination of a stove with a casing upon it, having apertures b³, rods I having threaded ends i, a holding plate I², having threads to receive said threads i on the rods I, the upper ends of said rods also being 55 threaded, nuts i⁵, j², upon said rods, and with washers b³, j, arranged to conform to the outline of the casing B where they engage said casing, substantially as herein specified.

In testimony that I claim the invention 60 above set forth I affix my signature in presence of two witnesses.

WONG I. GONG.

Witnesses:

T. F. BOURNE,
M. F. BOYLE.