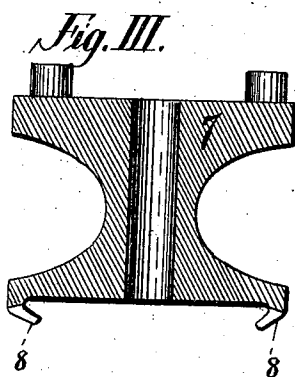
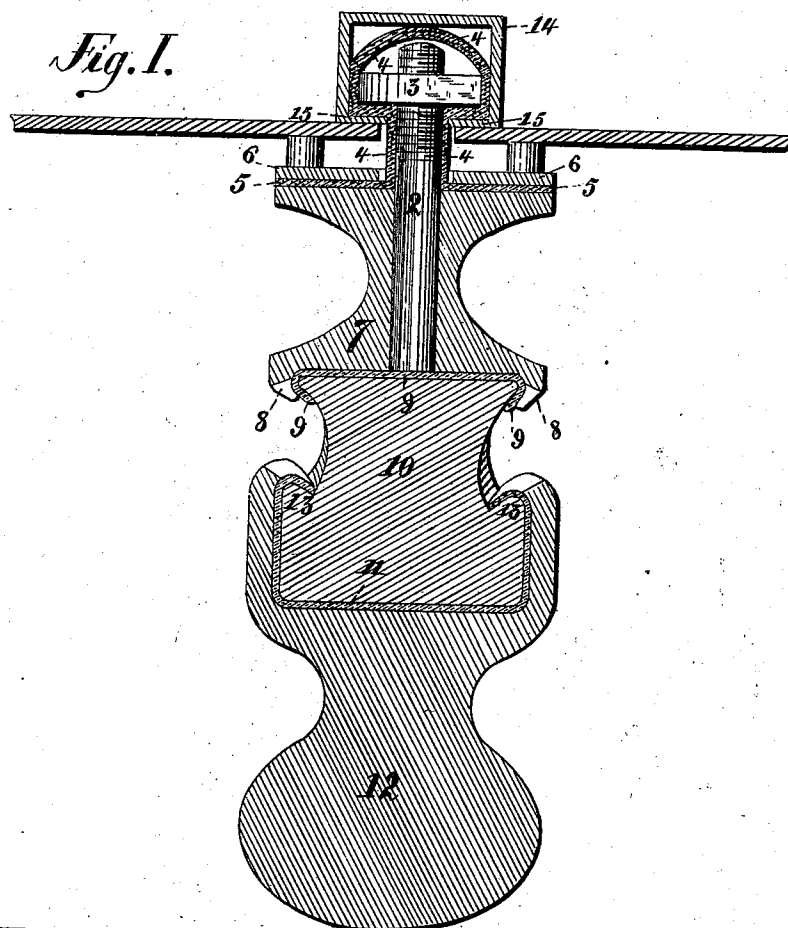


(No Model.)

J. G. WHITLOCK.
STOVE DOOR HANDLE.

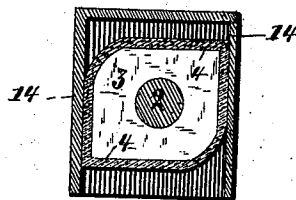
No. 338,455.

Patented Mar. 23, 1886.



Attest:
F. H. Hopkins.
S. H. Knight.

Fig. II.



Inventor:
James G. Whitlock.
By Knight Bros.
Atty's.

UNITED STATES PATENT OFFICE.

JAMES G. WHITLOCK, OF RICHMOND, VIRGINIA.

STOVE-DOOR HANDLE.

SPECIFICATION forming part of Letters Patent No. 338,455, dated March 23, 1886.

Application filed March 17, 1885. Serial No. 159,216. (No model.)

To all whom it may concern:

Be it known that I, JAMES G. WHITLOCK, a citizen of the United States, residing at Richmond, in the county of Henric and State of Virginia, have invented certain new and useful Improvements in Stove-Door Handles, of which the following is a specification.

My invention relates to an improved construction of handles for stoves, ranges, heaters, furnaces, and the like, and for use in other places where it is especially desirable to prevent or lessen the conduction of heat from the handle proper to the part to which it is fixed.

In Letters Patent No. 312,940, granted to me February 24, 1885, I have described a mode of preventing the conduction of heat from a stove-door to the handle thereof by forming the handle proper with a central bore larger in diameter than the metallic stem which passes through it and applying packings of asbestos between the inner face of the handle proper and the stove-door and between the outer face of the handle and the head of the attaching-screw stem. Such construction, therefore, as I have shown, described, and claimed in said patent I do not claim in this application, though I embody the packing between the inner face of the handle proper and the door in my improvements.

In another application, Serial No. 159,217, of even date herewith (March 17, 1885,) I show, describe, and claim improvements in which I embody as part of the construction the packing between the inner face of the handle proper and the door. I also show, describe, and claim therein a metallic shield made of hollow or skeleton form, a wrapping of asbestos around the stem within and in front of the door, and a washer of asbestos around the stem on the inside of the door. Such improvements in said application I do not therefore claim in this application, though the other application necessarily embodies a feature claimed in said patent and features shown and described in the present case.

My present invention is a means for producing, by the use of asbestos or like non-conducting material, one or more complete separations between the handle proper and the fire and the furnace or stove door to which the said handle is attached.

My improvement consists in the construction hereinafter described, and pointed out in the claims.

It will therefore be seen that the patent referred to relates to the separation of the handle proper from the stem and outside of the door.

The other application referred to relates to the separation of the stem from the inside and the outside of the door and the handle proper from the outside of the door.

The present application relates to the separation of the inner end of the stem and the nut by an envelope, a protector for the envelope, and the separation of a separable handle.

In the accompanying drawings, Figure I is a longitudinal section of a stove-door handle, illustrating my invention. Fig. II is a transverse section on the line 22, Fig. I, illustrating the mode of capping the internal non-conducting covering of the handle attachments with a metallic shield to protect the non-conducting envelope from injury. Fig. III is a longitudinal section of a modified form of handle-base.

1 represents a portion of the stove-door, 2 the attaching-stem, and 3 a nut by which the said stem is secured to the door. An asbestos envelope, 4, is applied over the nut 3 and the extremity of the stem 2, said envelope extending in the form of an insulating shield or washer, 5, in front of the stove-door. When desirable, I apply in front of the stove-door, and either in front or behind the asbestos shield or washer 5, a metallic insulating-shield, 6, made of skeleton or hollow form, to lessen conduction and permit the circulation of air. The handle-base 7, which is permanently fixed to the stem 2, is also of skeleton or hollow form, so as to reduce the conduction of heat. The said handle-base is formed in front with malleable lugs 8, or a flange in lieu thereof, which are bent over the main handle 10 to permanently receive the same, an asbestos insulating-washer, 9, being interposed between the main handle-base 7 and handle 10, and extended around the attaching-shank of the latter, so as to prevent metallic contact between them.

By the above-described means I provide two

complete separations between the main handle 10 and the stove or furnace door 1, so as to prevent the direct conduction of heat.

For use in furnaces where the door becomes
 5 excessively hot, so that better protection is required against the conduction of heat, I employ a supplemental handle, 12, the handle 10 being in such form as to permit the applica-
 10 tion thereto of the supplemental handle 12 around a body of asbestos, 11, which is interposed between them, a suitable shoulder, 13, being formed on the handle 10 to retain the supplemental handle 12, and the radial lugs or flanges, as before described, with reference
 15 to the attachments between the parts 7 8 10, to secure the supplemental handle 12 against rotation relatively to the handle 10, the lugs entering recesses, as shown.

It will be apparent that the attachment be-
 20 tween the parts 10 and 7 may, if preferred, be made with reference to the attachments between the parts 12 and 10, the base of the handle 10 being made with a malleable flange or lugs to embrace a suitable flange or shoul-
 25 der on the handle-base 7. In this case the base of the handle 10 would be exposed to radiation of heat from the stove or furnace door, which would be undesirable, especially in the case of a horizontal feed-door on top of the
 30 stove or furnace. The handles of these horizontal doors, as ordinarily constructed, often become very hot by the heat rising from the top of the stove or furnace.

In order to protect the insulating-envelope
 35 4 from injury by contact with the fuel in the stove, I cover it with a cap, 14, which may be of sheet metal and simply bent over the nut 3, or may be of cast-iron with flanges 15, behind which the corners or ends of the nut 3 are
 40 turned, with the cap to permanently secure the parts together.

The metal shield 6 may be made in one

piece with the handle-base 7, as shown in Fig. III, or it may be dispensed with altogether.

Having thus described my invention, the
 45 following is what I claim as new therein and desire to secure by Letters Patent:

1. The combination of a handle having a stem, 2, a nut by which the handle is secured, and a protecting non-combustible non-con-
 50 ducting envelope, 4, substantially as set forth.

2. The combination of a handle having a stem, 2, a nut by which the handle is secured, non-conducting asbestos envelope 4, and shield
 55 5, and metallic insulating-shield 6, substantially as set forth.

3. The combination of a handle having a stem, 2, a nut by which the handle is secured, metallic handle-base 7, and asbestos shield 9,
 60 the asbestos shield being interposed between the handle and handle-base, substantially as set forth.

4. The combination of a handle, 10, having a stem, 2, handle-base 7, a nut by which the handle is secured, metallic insulating-shield 6,
 65 envelope 4, having shield 5, supplemental handle 12, and asbestos non-conducting shields 9 and 11, substantially as set forth.

5. The combination of a handle, 10, handle-base 7, asbestos shield 9, stem 2, nut 3, and
 70 envelope 4, substantially as set forth.

6. The combination of a handle, 10, handle-base 7, asbestos shield 9, stem 2, nut 3, en-
 75 velope 4, and cap 14, having flanges 15, substantially as set forth.

7. The combination of a handle, 10, supplemental handle 12; asbestos shield 11, handle-base 7, asbestos shield 9, stem 2, and nut 3,
 substantially as set forth.

JAMES G. WHITLOCK.

Witnesses:

OCTAVIUS KNIGHT,
 HARRY E. KNIGHT.