No. 705,204. Patented July 22, 1902.

W. G. BURNS.

SELF HEATING SAD IRON.

(Application filed June 10, 1901.)

(No Model.)

Fig. 1.

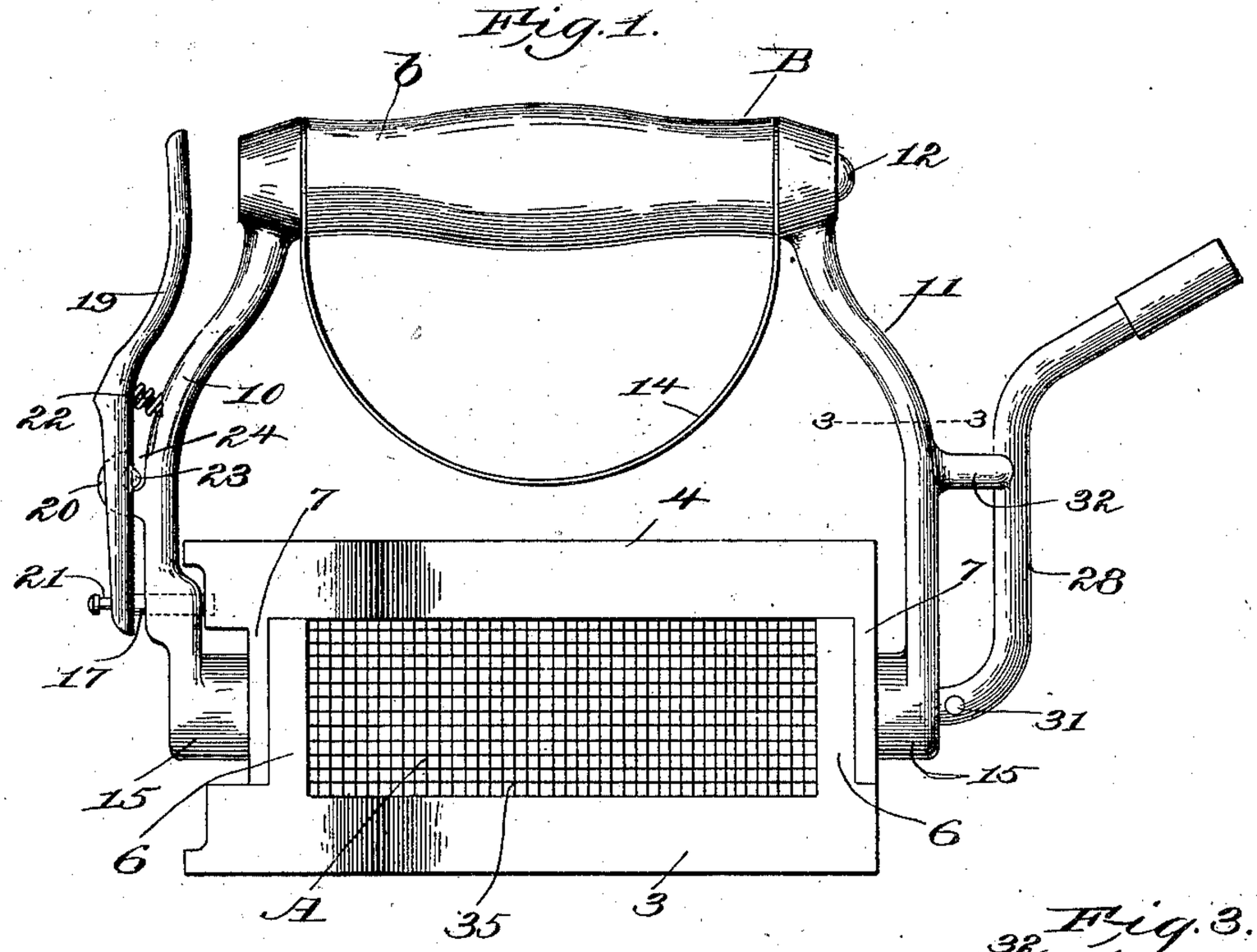


Fig. 2.

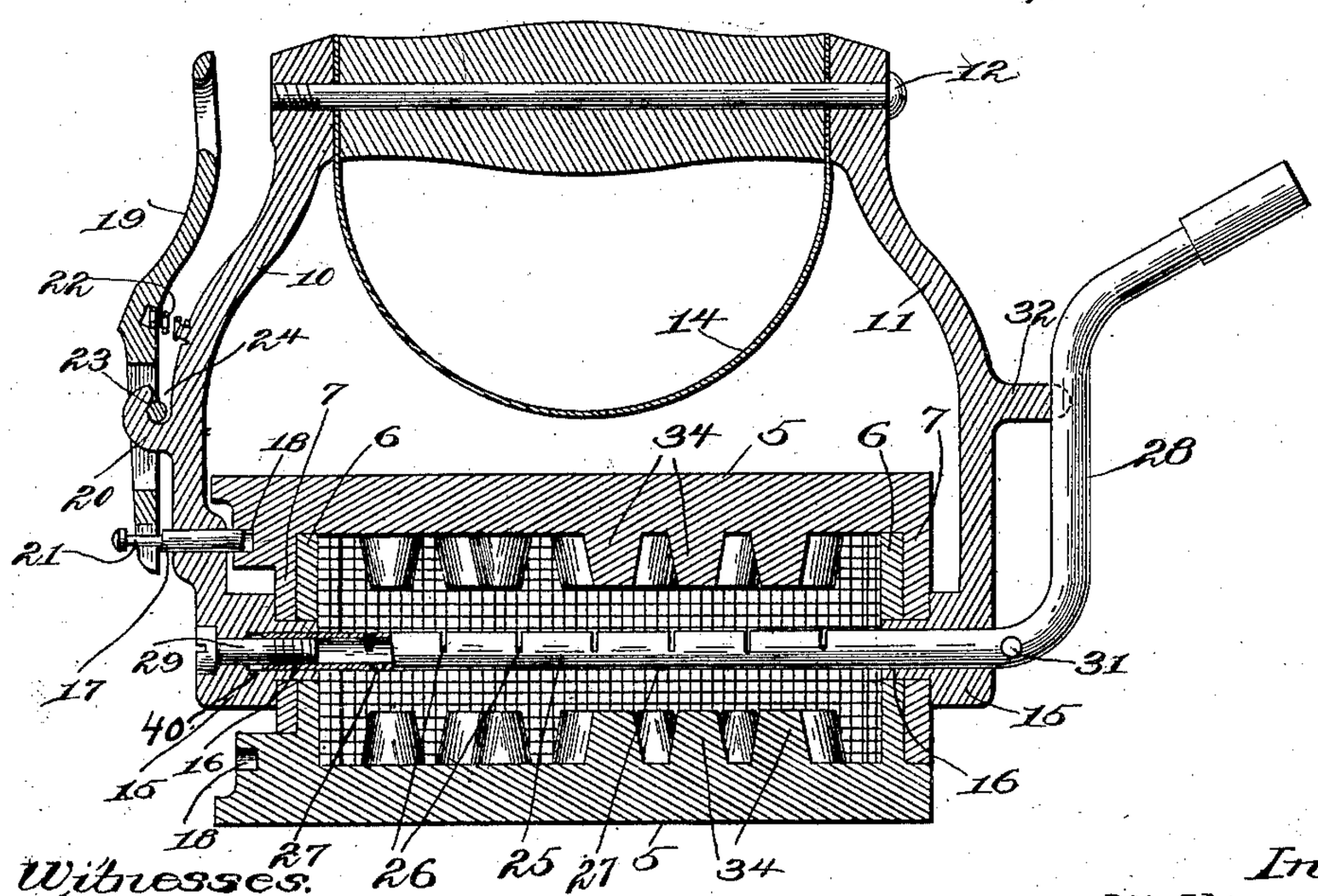
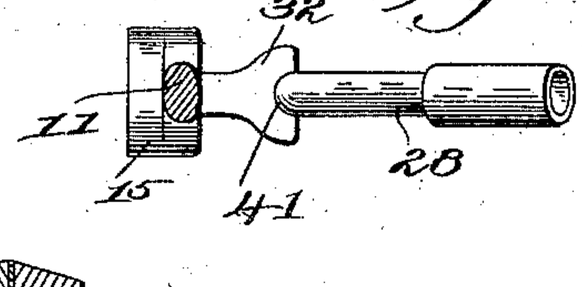


Fig. 3.



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UNITED STATES PATENT OFFICE.

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SELF-HEATING SAD-IRON.

SPECIFICATION forming part of Letters Patent No. 705,204, dated July 22, 1902.

Application filed June 10, 1901. Serial No. 63,870. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM G. BURNS, a citizen of the United States, and a resident of Boston, county of Suffolk, State of Massachusetts, have invented an Improvement in Self-Heating Sad-Irons, of which the following description, in connection with the accompanying drawings, is a specification, like characters on the drawings representing like parts.

This invention relates to self-heating sad-irons which comprise in their structure an ironing-body provided with a plurality of smoothing-faces, the said ironing-body being pivotally mounted to a suitable handle, whereby either one of these smoothing-faces may be brought into operative position, and suitable means are provided for keeping the iron hot while it is in use; and the object of the invention is to improve and simplify in their construction this general class of articles, all as hereinafter described, and pointed out in the claims.

In the drawings, which illustrate the best form of my invention now known to me, Figure 1 is a side elevation of a self-heating sad-iron. Fig. 2 is a vertical section of Fig. 1; and Fig. 3 is a section on the line 3 3, Fig. 1.

As illustrated, the ironing-body is designated generally by A, the said ironing-body being pivotally supported by a suitable handle B, as is usual in this class of devices.

The ironing-body A comprises the two oppositely-disposed sections 3 and 4, each of which has a smoothing-face 5. The section 3 has at each end thereof and extending across the same the flanges 6, and the section 4 has the coöperating flanges 7, which overlap the flanges 6, the edge of the flange on each section abutting the other body-section and the overlapping flanges having alined apertures through which pivots or journals on the handle enter, as hereinafter described, whereby the said sections are not only united, but are also supported for turning movement.

The handle B comprises the two hangers 10 and 11, between the upper ends of which the handhold *b*, which may be of any suitable heat-resisting material, such as wood, is supported, the said handhold being preferably secured in place by means of the bolt 12 passing through the upper ends of the hangers and through the said handhold, as best shown in Fig. 2. A hand-guard 14 is attached to the handle above the body of the iron in order to protect the hand of the person using the iron, said hand-guard being preferably a U-shaped member of suitable material, which is suspended from the bolt 12 of the handle, the ends of said U-shaped member being clamped between the upper ends of the hangers 10 and 11 and the ends of the handhold *b*. The lower end of each hanger terminates in a hub 15, and the said hubs carry the journals or pivot-bearings 16, which pass through the apertures in the overlapping flanges at the ends of the ironing-body, as described above. As illustrated in the drawings, the said pivot-bearings 16 are preferably made integral with the hangers.

From the above description it will be obvious that the hangers not only support the ironing-body for turning movement, but also have the function of securing the two sections of the said body together.

When using either smoothing-face, it is desirable that the body should be locked against rotation, and I have provided for this by means of the locking-bolt 17, which plays through a suitable aperture in the lower end of the hanger 10, the end of the bolt entering either of the sockets 18 in the adjacent end of the ironing-body, according to which face is being used. The pin is withdrawn from the aperture 18, when it is desired to turn the ironing-body, by means of the lever 19, the said lever being pivotally mounted upon the lug 20 on the hanger 10 and having its lower slotted end engaging a groove 21 in the end of the locking-bolt 17. A suitable spring 22 serves to hold the lever in its operative position. In this instance of my invention the lever is made detachable from the hanger 10, the said lever having the pivot-pin 23, which is supported in a seat at the lower end of an open slot 24 in the said lug 20.

Suitable means, such as a gas-burner, are provided for keeping the iron hot when in use, and in this embodiment of my invention the said burner is supported entirely by the hubs of the handle-hangers and is so con-

structed as to adjustably tie together the lower ends of said hangers. 25 designates a burner-tube which extends longitudinally of the iron-body, the said tube having the slits 26 on its upper side and the apertures 27 on its lower side and passing through a central bore in the hub of the hanger 11, the end of said tube being seated in a socket 40 in the journal and hub of the hanger 10. A suitable screw 29, passing axially through the said hub, is screwed into the end of the tube, and thus secures it to the hub. The portion 28 of the burner-tube which extends outside of the iron-body and to which a flexible gas-tube is adapted to be connected in any suitable way is bent upwardly and is seated in a half-round seat 41 in the lug 32 on said hanger 11. By means of this construction the burner is carried directly by the handle and is not, therefore, affected in any way by the rotation of the iron-body. Moreover, by connecting the burner-tube 25 to the hanger 10 by means of the screw 29 and by providing the forked lug 32 to support the end 28 of the said burner-tube it will be seen that the burner can be easily and quickly removed or replaced, as occasion may require, and, what is more important, when in place it operates to adjustably tie together the lower ends of the hangers, and thus prevents any liability of their spreading, for since the portion 28 of the burner-tube engages the outside of the hanger 11 it will be seen that by tightening the screw 29 the lower ends of the hangers may be drawn together and firmly held in such position, the end of the burner-tube telescoping into the socket 40.

It often happens in practice that the handholds *b* vary somewhat in length, and by making the connection between the end of the burner-tube and the hub of the hanger 10 an adjustable connection, as shown, the hubs of the hangers may be brought into and held in the proper position without reference to the variations in the length of the handhold *b*.

A lateral opening 31 in the burner-pipe provides for the admission of air to the burner, as is customary.

The inner surface of the sections of the iron-body are preferably provided with the projections 34, which increase the heating-surface.

The open space at the sides of the iron between the smoothing-surfaces is preferably covered by a suitable reticulated material 35 in order to properly ventilate the chamber between the heating-surfaces and provide for the best degree of combustion of the heating-flame.

The structure may be modified in various ways without departing from the spirit of my invention.

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

1. In a sad-iron, an ironing-body comprising two sections, each having a smoothing-surface, an inwardly-disposed flange at each end of each section, the flanges at either end of the body overlapping, a handle having hangers provided with pivot portions, said pivot portions being integral with the hangers and passing through the overlapping flanges, to unite the two sections together and to support the ironing-body for turning movement.

2. In a sad-iron, an ironing-body comprising two sections each having a smoothing-surface, an inwardly-disposed flange at each end of each section, the flanges on one section abutting at their inside edges the inside of the body of the other section, a handle having hangers, each hanger having integral therewith a pivot-bearing which extends through the adjacent overlapping flanges, said pivot-bearings serving to unite the two sections of the body and support the same for turning movement.

3. In a self-heating sad-iron, an ironing-body comprising two sections, each having a smoothing-surface, an inwardly-disposed flange at each end of each section, the flanges at each end of the body having overlapping portions, a handle having hangers each hanger having integral therewith a pivot-bearing which passes through the adjacent overlapping flanges, the said pivot-bearings operating to unite the two sections together and support the body for turning movement, and a burner projecting through one of said journals and extending lengthwise of the iron between the sections thereof, the end of said burner being supported by the other of said pivot-bearings.

4. In a self-heating sad-iron, an ironing-body comprising two sections, each having a smoothing-surface, an inwardly-disposed flange at each end of each section, the flanges at each end of the body overlapping each other throughout their entire extent, a handle including hangers having integral therewith pivot-bearings which pass through the overlapping flanges, the said pivot-bearings operating to unite the two sections and support the body for turning movement, and a burner projecting through one of said pivot-bearings and extending lengthwise of the iron between the sections thereof, the end of the burner being secured to the other of said pivot-bearings and the said burner having a portion projecting beyond the iron, one of said hangers having an arm shaped to form a seat to receive the projecting portion of the burner.

5. In a self-heating sad-iron, an ironing-body comprising two sections, each having a smoothing-surface and an inwardly-disposed flange at each end thereof, the flanges at each end of the body overlapping, a handle having hangers provided with pivot portions, said pivot portions being integral with the hangers and passing through the overlapping flanges, combined with a detachable burner located between the said sections.

6. In a self-heating sad-iron, an ironing-

body having a plurality of smoothing-faces, a handle having hangers each provided with a pivot-bearing integral therewith, said pivot-bearings projecting through the ends of the iron-body and supporting the same for turning movement, a detachable burner-tube extending centrally through one of the pivot-bearings and lengthwise of the iron-body, means to adjustably connect the end of said burner-tube to the other pivot-bearing, that portion of the tube outside the iron-body being bent and engaging the outside of the adjacent hanger, whereby the burner-tube operates to tie together the lower ends of the hangers.

7. In a self-heating sad-iron, an ironing-body having a plurality of smoothing-faces, a handle having hangers provided with pivot-bearings, said pivot-bearings projecting through the ends of the iron-body and supporting the same for turning movement, a burner-tube extending centrally through one of the pivot-bearings and lengthwise of the iron-body, a screw passing through the other pivot-bearing and into the end of the burner-tube, that portion of the tube outside the iron-body being bent and engaging the outside of the adjacent hanger, whereby the burner-tube operates to tie together the lower ends of the hangers.

8. In a self-heating sad-iron, an ironing-body comprising two sections, each having a smoothing-face, an inwardly-disposed flange at each end of each section, the flanges at each end of the body having overlapping portions, a handle having hangers, said hangers having rigid therewith bearings which pass through the overlapping portions of said flanges, a removable burner-tube passing through one of said bearings and entering between the sections of the iron-body, a device carried by one of the hangers for holding the burner-tube normally in position, and a latch carried by the other hanger and engaging one section of the iron-body to normally hold the said body fixed with relation to said hangers.

9. In a self-heating sad-iron, an ironing-body having a plurality of smoothing-faces, a handle having hangers provided with pivot-bearings, said pivot-bearings projecting through the ends of the iron-body and supporting the same for turning movement, a burner-tube extending centrally through one of the pivot-bearings and lengthwise of the iron-body, the end of said burner being supported in an axial socket in the other pivot-bearing, a screw passing axially through the last-named pivot-bearing and into the end of the burner-tube, and adjustably securing the end of the burner-tube to said bearing, that portion of the tube outside the iron-body being bent and engaging the outside of the adjacent hanger, whereby the burner-tube operates to adjustably tie together the lower ends of the hangers.

10. In a self-heating sad-iron, a hollow ironing-body having a plurality of smoothing-faces, a handle having hangers adapted to support the ironing-body for turning movement, a burner-tube extending lengthwise of said ironing-body and passing through the lower end of one of said hangers, said burner-tube being detachably supported by said hanger and projecting outside thereof, said projecting end being constructed to have a gas-pipe connected thereto, and a screw passing through the other hanger and into the adjacent end of the burner-tube, said screw serving to rigidly tie the tube to the hanger, combined with means to lock the ironing-body in either of its adjusted positions.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

WILLIAM G. BURNS.

Witnesses:
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