

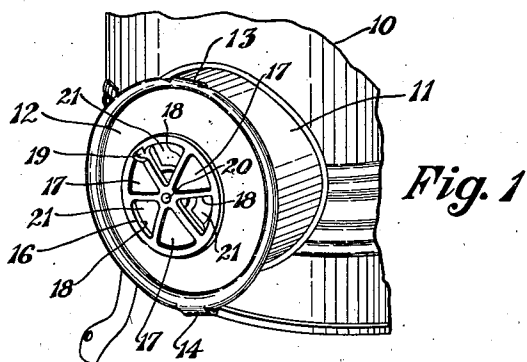
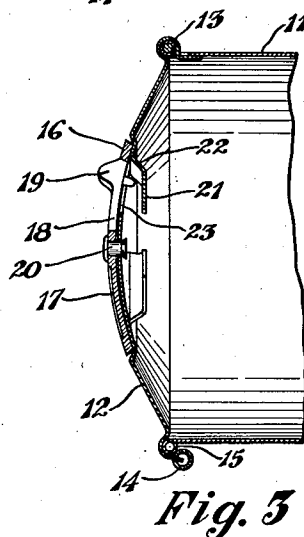
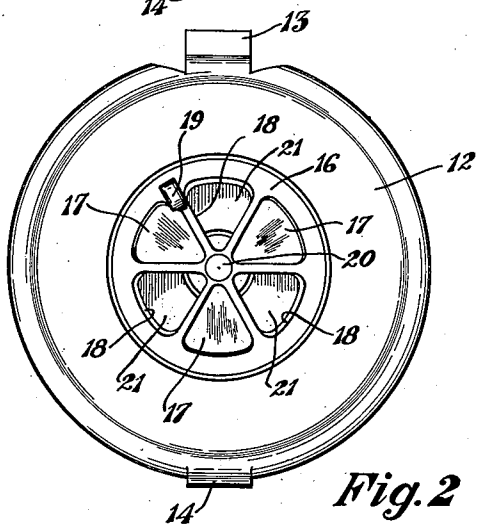
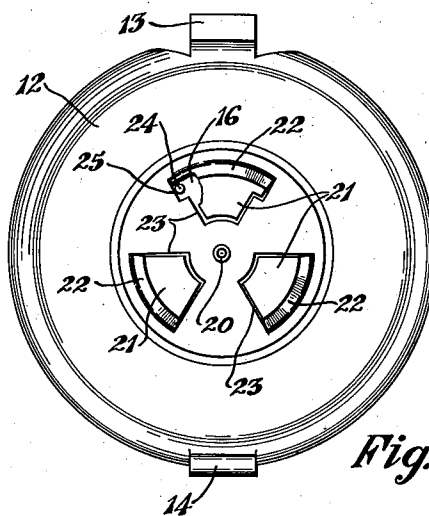
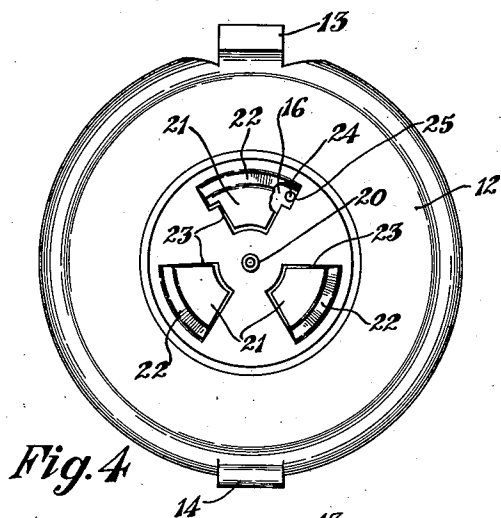
Dec. 15, 1936.

M. L. HUNKER

2,064,064

DRAFT REGULATOR AND SPARK ARRESTER FOR STOVES

Filed Sept. 6, 1934



Inventor

M. L. Hunker

Trease and Bishop

Attorneys

UNITED STATES PATENT OFFICE

2,064,064

DRAFT REGULATOR AND SPARK ARRESTER
FOR STOVESMartin L. Hunker, Dover, Ohio, assignor to The
Reeves Manufacturing Company, Dover, Ohio,
a corporation of Ohio

Application September 6, 1934, Serial No. 742,895

1 Claim. (Cl. 126—290)

The invention relates to drafts for stoves and more particularly to a combined draft and spark arrester especially adapted for use upon sheet metal, wood-burning heating stoves.

5 Stoves of this general character are of air-tight construction and when operated with the drafts open produce a very vigorous fire and are a constant fire menace because of the sparks which fly through the open drafts onto the floor
10 covering, furniture, or furnishings in the room in which the stove is located.

The object of the improvement is to provide a combined draft and spark arrester, so arranged that while sufficient air is furnished to the fire
15 through the open draft, a shield is provided at all times to prevent sparks from passing through the openings in the draft.

Another object is to provide a rotary or wheel type draft in which the spark arresting shields
20 are formed of the metal cut out to produce the draft openings.

The above objects, together with others which will be evident from an inspection of the drawing and the following description, or which may
25 be later pointed out, may be attained by constructing the improved draft and spark arrester in the manner illustrated in the accompanying drawing, in which

Figure 1 is a perspective view of a portion of
30 a heating stove showing the improved draft and spark arrester embodying the invention;

Fig. 2, a front elevation of the draft and spark arrester, showing the draft in open position;

Fig. 3, a transverse sectional view of the same
35 in open position;

Fig. 4, an elevation of the interior of the draft and spark arrester showing the draft in closed position; and

Fig. 5, a similar view showing the draft in
40 open position.

Similar numerals refer to similar parts throughout the drawing.

A portion of a sheet metal heating stove of the general character above referred to is illustrated at 10 and the combined draft and spark
45 arrester to which the invention pertains may be attached directly to the body of the stove or, as shown in the drawing, may be mounted upon the ash pouch 11.

50 The pressed steel ash door 12 forming a sheet metal supporting wall for the draft regulator may be hinged as at 13 to the ash pouch and provided at a point diametrically opposite to the hinge with a latch 14 adapted to fit over the rim
55 bead 15 upon the ash pouch.

The wheel draft regulator, preferably formed of cast iron, as shown at 16, may be of any usual design, comprising the spaced triangular panels 17 with similarly shaped intervening openings 18 therebetween, and a lug 19 by means of which
5 the draft may be easily rotated upon its pivot 20 to the open or closed position as desired.

It is common practice to cut out the ash door or other surface upon which the draft regulator is mounted, the cut-out portions being of a size
10 and shape to register with the openings 18 in the draft regulator when the same is moved to the open position. With such a construction of draft regulator upon air-tight, wood-burning
15 stoves of the character above referred to, fire roars so vigorously when the draft is open that sparks and burning coals fly through these openings into the room in which the stove is located, thus causing a constant fire menace
20 when the stove is in operation.

In order to overcome this objection, the improved draft regulator embodying the invention has combined therewith a spark arrester which prevents sparks and live coals from flying
25 through the openings in the draft regulator while at the same time permitting sufficient air to pass therethrough to produce the desired draft through the burning fuel.

This may be accomplished by forming the spark arresting shields 21 from the metal cut
30 out of the ash door or other surface supporting the draft regulator, this metal being uncut on one side and bent inward as shown at 22 so as to offset the spark arrester shields inward from the openings 23 thus formed in the door to register
35 with the openings 18 of the draft regulator when the same is moved to open position.

It will thus be seen that when the draft regulator is in the open position with the openings 18 therein registering with the openings 23 in
40 the door, the shields 21 will prevent any sparks or live coals from passing outward through these openings while at the same time, these shields being offset inward from the door will permit
45 sufficient air passing through the openings 18 of the draft regulator to pass through the openings 23 of the door and around the edges of the shields in order to properly regulate the draft of the fire.

For the purpose of limiting the opening and closing movement of the draft regulator, a stud
50 24 may project inwardly therefrom for contact with opposite sides of one of the openings 23. In order to give the draft regulator full opening and closing movement, this particular opening
55

23 may be cut out at opposite sides as at 25 to receive the stud 24 in each position.

I claim:

5 A combined draft regulator and spark arrester including a sheet metal supporting wall having a plurality of integral spaced segmental portions offset inward therefrom forming openings with inwardly offset shields coextensive therewith, and a wheel draft regulator rotatably mounted

upon said supporting wall and having spaced segmental panels of substantially the same size and shape as said openings, and intervening openings of substantially the same size and shape as the openings in the supporting wall, the panels and openings in said draft regulator being arranged to alternately register with the openings in the supporting wall. 5

MARTIN L. HUNKER.