

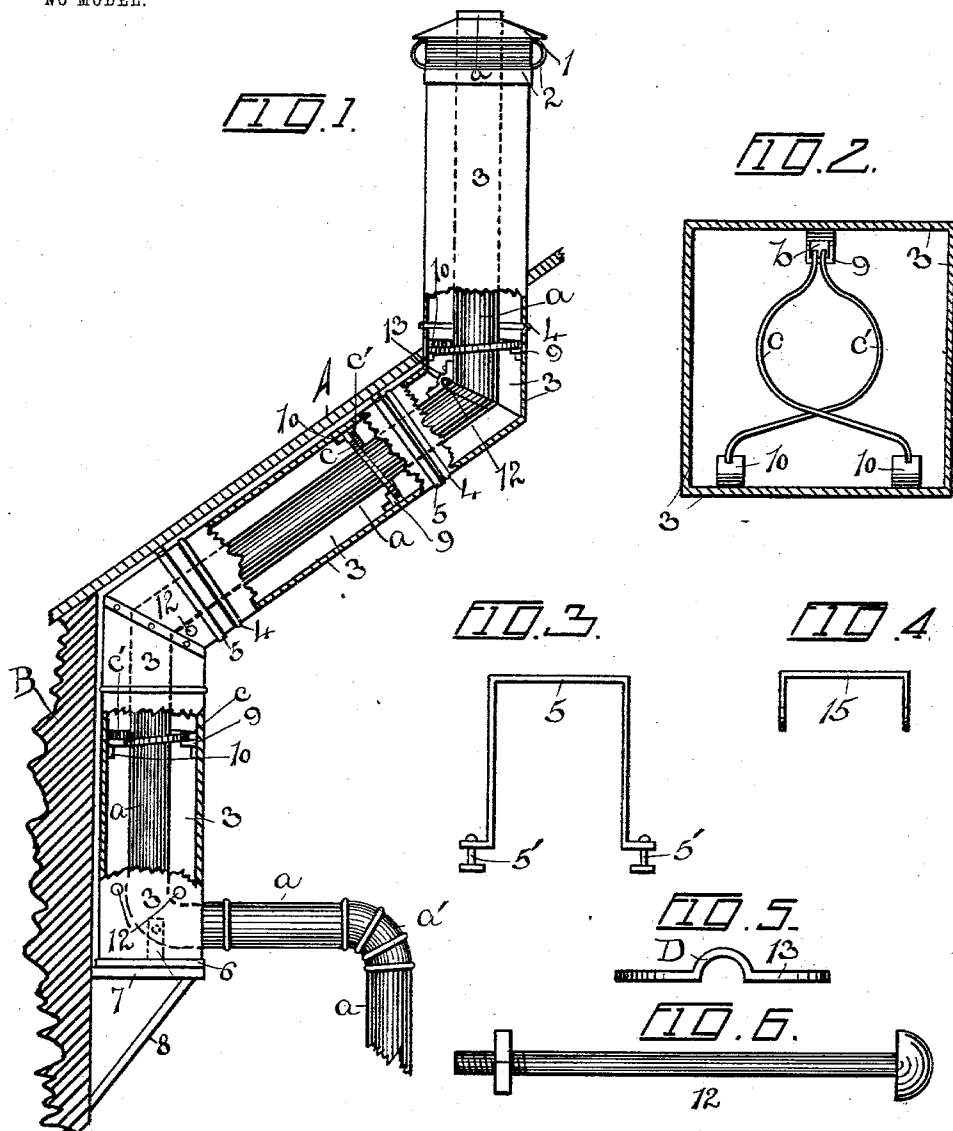
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F. C. MELSHA.
SAFETY STOVE FLUE.

APPLICATION FILED OCT. 20, 1902.

NO MODEL.



WITNESSES:

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FRANK C. MELSHA, OF LYNCH, NEBRASKA.

SAFETY STOVE-FLUE.

SPECIFICATION forming part of Letters Patent No. 717,592, dated January 6, 1903.

Application filed October 20, 1902. Serial No. 128,041. (No model.)

To all whom it may concern:

Be it known that I, FRANK C. MELSHA, residing at Lynch, in the county of Boyd and State of Nebraska, have invented certain useful Improvements in Safety Stove-Flues; and I do hereby declare that the following is a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification.

This invention relates to a new and useful safety stove-flue.

15 The object of my invention is to provide a stove-flue adapted to receive one or more stovepipes and act as a chamber through which the stovepipe is conducted, so that the stovepipes are held within an air-chamber in
20 open communication with the air, permitting the escape of the heat should the stove become overheated.

In the accompanying drawings I have shown in Figure 1 a sectional view, with portions broken away, of a cottage or house provided with one of my safety stove-flues. Fig. 2 shows a transverse view of my safety stove-flue. Fig. 3 shows a detail of the hanger used in my invention. Fig. 4 discloses a detail of the keeper I use in securing the base of my safety stove-flue. Fig. 5 shows a detail of the loop-bracket used in securing the stovepipe-sections, especially at the joints, while Fig. 6 discloses one of the bolts I use
35 in supporting the stovepipes.

In carrying out the aim of my invention, which is to provide a flue adapted to receive one or more stovepipes, I position a shelf 7 at a suitable point within the arm from which the stovepipe is to be conducted. This shelf 7 I support by means of a suitable bracket 8. Upon this shelf 7 I next place a suitable base 6, of non-burning material, such as iron, and to this base 6 I secure a suitable keeper 15, comprising a three-sided strap-metal frame, the ends of which are perforated, so as to receive a rivet. This keeper is securely fastened by any suitable means to the base 6. Extending from this base 6 is the flue, comprising a rectangular conduit or pipe 3, preferably made of sheet-iron and made in sections, so that this flue may be taken apart

and easily cut where bends are to be made. This flue is then carried upward a suitable distance and may be secured directly to the 55 roof A of the building by means of suitable hangers 5, having ears through which extend suitable bolts 5'. In Fig. 3 one of these hangers is disclosed in detail.

Each flue-section 3 at one or more points is 60 provided at one side with a perforated ear 9, centrally disposed within the flue, while upon the opposite side each flue-section is provided with two ears, as 10, and clearly shown in Fig. 2.

65 The bottom flue-section 3 is provided with a suitable opening, permitting the entry of the stovepipe A, which is provided with the elbow a', as shown in Fig. 1, and is conducted through the first flue-section 3. In order to 70 strengthen the flue and prevent the displacement of the stovepipe A within the same, I provide the first flue-section 3 near the inner elbow with two bolts 12, as shown in Fig. 1, which prevent the displacement of the stove- 75 pipe. In order to hold the stovepipe in a proper position within the flue, I next use a plurality of counterpart spring-arms c and c', used in sets of two, a top view of one set of spring-arms being shown in Fig. 2. The 80 stovepipe having been passed through the flue 3, one of the arms—as c, for instance, which has both of its ends bent downward, as has the counterpart arm c'—has one of its bent members inserted into the opening b of 85 the ear 9, when the remaining end of this arm c has its end projected through the perforation within the ear 10. The stovepipe is then placed in position when the remaining arm c' has one of its ends projected through 90 the opening b of the ear 9 and its remaining end inserted within the perforation of the remaining ear 10. These arms, it will be noticed, are approximately J-shaped and are preferably made of spring-wire, so that the arms 95 may be sprung into the ears, so that the stovepipe a is properly held within the flue.

Where the stovepipe-joints come within the flue, in order to strengthen the same I employ a loop-bracket 13, of pliable material, such 100 as soft iron, so that the same may be bent, and rivet this loop-bracket to the stovepipe-sections a, as is shown in Fig. 1. Through the loop of this bracket then may be extended a

suitable bolt, if the stovepipe-section α above the same is of any considerable length, so that the vertical section of the stovepipe may be supported by means of one of these loop-brackets.

5 In Fig. 1 the upper vertical pipe-section α is being supported by one of the loop-brackets 13, held by the bolt 12.

10 At the top the flue-sections 3 are provided with a hood 2, preventing any escape of hot air that might collect within the flue 3, while these hood portions 2 are covered by means of a cap 1 and have a perforation through which the stovepipe is made to slightly project, as is shown in Fig. 1.

15 These flues can be made in various sizes to accommodate one or more stovepipes. The flue shown in Fig. 2 is made to hold but one stovepipe. They can further be made of different sizes and in lengths, so that these flue lengths may be connected to one another, as are stovepipe-sections.

20 Having thus described my said invention, what I claim as new, and desire to secure by United States Letters Patent, is—

25 1. The combination with a suitable base, of a flue extending from said base in sections, each flue-section being provided along one side with a centrally-positioned perforated

ear, perforated ears disposed in sets of two 30 within the flue along the side opposite, a stovepipe passing through said flue, arms having their ends bent downward and adapted to be seated within the perforations of aforesaid ears, said arms being used in sets of two to 35 secure the aforesaid stovepipe within said flue, bolts passing through said flue and adjacent to said stovepipe to support the same, a loop-bracket secured to said stovepipe at the points where elbows are used, a support- 40 ing-bolt passing through the loop of the aforesaid bracket, the aforesaid flue being open-ended above, and a perforated cap secured to the open end of the aforesaid flue, the aforesaid stovepipe passing through said per- 45 forated cap as and for the purpose set forth.

2. A flue in combination with a perforated ear positioned upon one edge, perforated ears 50 disposed in sets of two within said flue opposite the aforesaid ear, and curved spring-arms removable within said ears all arranged substantially as and for the purpose set forth.

In testimony whereof I affix my signature in presence of two witnesses.

FRANK C. MELSHA.

Witnesses:

JOHN KOVAL,
DAN MELSHA.