(No Model.)

C. F. FILSON.

GUTTER BOX FOR TINNERS.

No. 357,075. Patented Feb. 1, 1887.

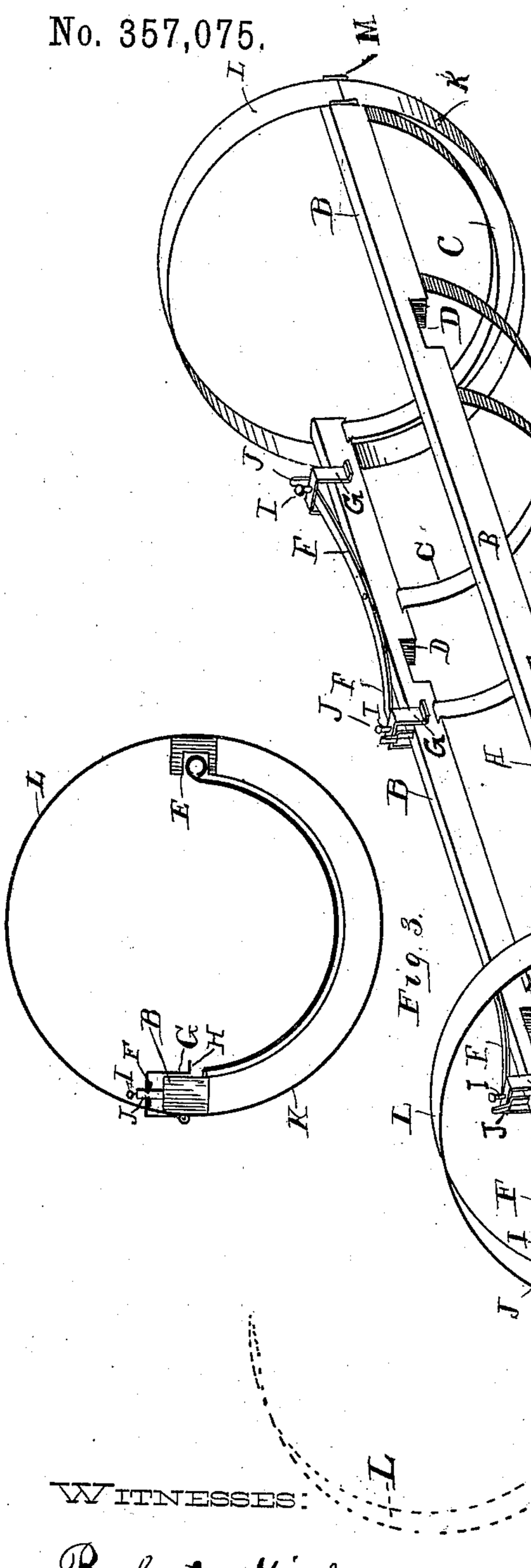

Fig. 1.

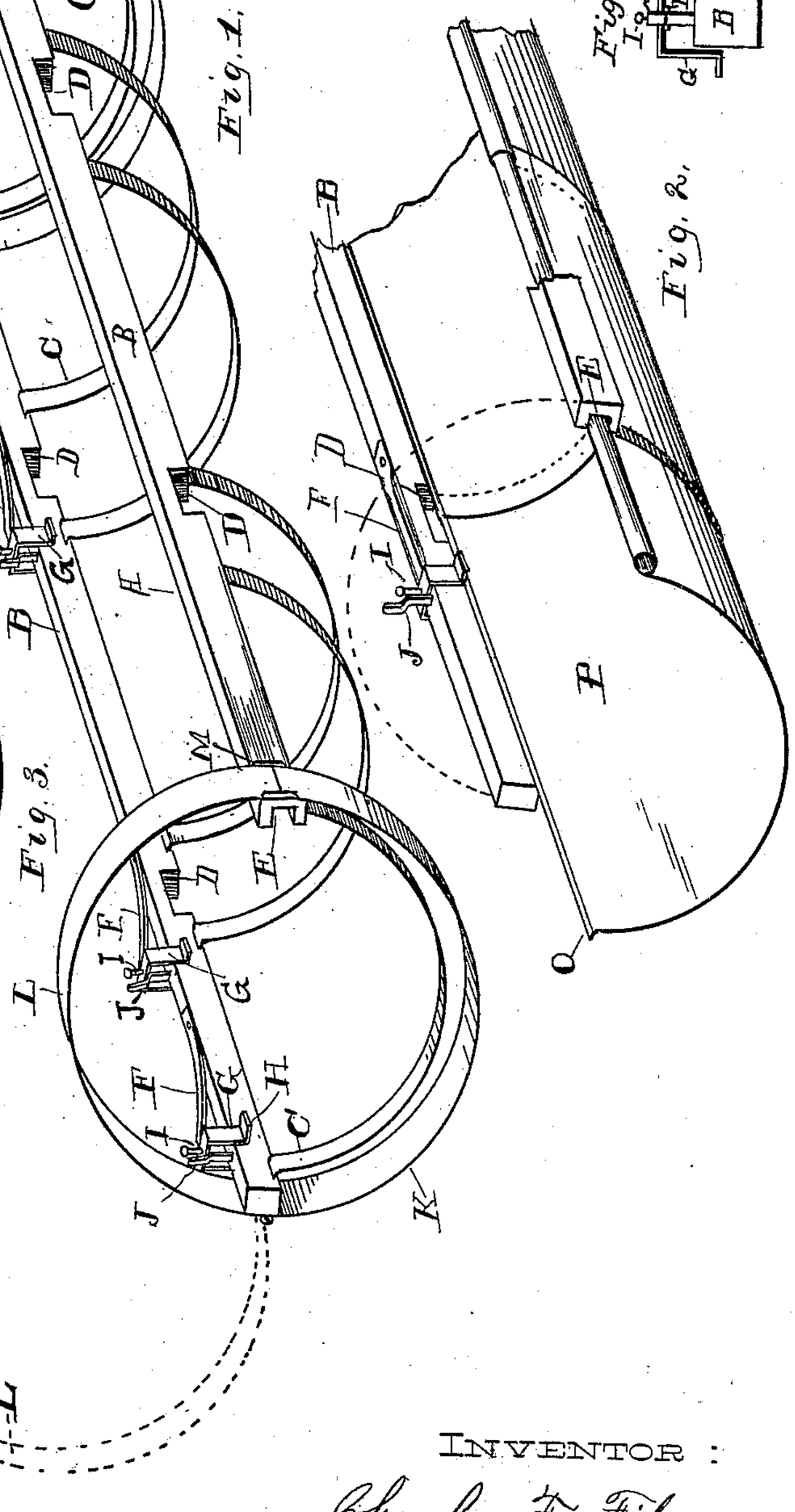

Fig. 2.

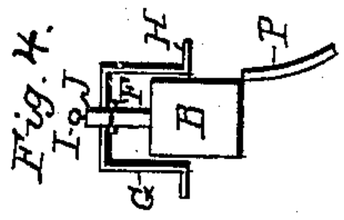

Fig. 4.

Fig. 3.

Fig. 5.

WITNESSES:

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CHARLEY F. FILSON, OF POINT PLEASANT, WEST VIRGINIA.

GUTTER-BOX FOR TINNERS.

SPECIFICATION forming part of Letters Patent No. 357,075, dated February 1, 1887.

Application filed January 2, 1885. Serial No. 151,767. (No model.)

To all whom it may concern:

Be it known that I, CHARLEY F. FILSON, of Point Pleasant, in the county of Mason and State of West Virginia, have invented a new and useful Improvement in Gutter-Boxes for Tinners, which improvement is fully set forth in the following specification and accompanying drawings, in which—

Figure 1 is a perspective view of my improved gutter-box for tinners; Fig. 2, a perspective view of the forward end of the same, having therein the sections of the gutter ready for soldering; Fig. 3, a transverse sectional view of the same. Fig. 4 is a detail view showing in end elevation the gutter, vertical catch, thumb-piece, and spring.

The present invention relates to an improvement in gutter-boxes for tinners, consisting of a pair of side pieces connected together by means of pendent hemispherical ribs to receive therein the sections of the gutter, which are held in position relative to each other by means of a series of springs secured to one of the side pieces and pressing downwardly upon the edge of the said sections, while the opposite side of the gutter-section rests within a groove on the inner face of the side piece. A pair of hemispherical ribs extend upwardly from the side pieces, and are hinged thereto at one side, which permits of them being opened and closed. The sections of the gutter, being placed within this device, can be soldered on the inner side and the whole device turned over, resting upon the upper hemispherical ribs, and the lower side is also soldered, after which the said gutter may be removed, all of which will now be set forth in detail.

In the accompanying drawings, A is a gutter-box consisting of a pair of side rails or pieces, B, of any convenient lengths, preferably formed of wood or other light material. Extending from the lower sides of these pieces B, I provide a series of pendent hemispherical ribs, C, secured in any substantial manner and designed to be a little larger than the circumference of the gutter to be soldered. Those of the ribs C which are between the end ones I design to be placed in pairs at a short distance apart, and on the lower face of the side pieces, B, between these ribs, recesses D are cut. The object of these recesses D is to afford free access for the soldering-iron in soldering the ribbed and beaded edges of the gutter. On the inner face of one of the parallel pieces B a longitudinal groove, E, is provided, and upon the upper face of the opposite piece B a series of springs, F, are provided, secured at one end and extending longitudinally therewith, the opposite end having a staple-shaped transverse piece, G, projecting downwardly at each side of the piece B. The lower end of the inner part, G, is turned out horizontally, forming a wing, H. The upper part of the forward end of each spring F has a thumb-piece, I, by means of which said spring may be raised or lowered, and immediately forward of this thumb-piece is a vertical catch, J, for the purpose of pressing against the said thumb-piece. The springs F will press downwardly against the piece B; but when the sections of the gutter are being placed within the box the springs are raised by means of the thumb-pieces I and rest upon a projecting part of the catch J.

Pendent from the outer face of the side pieces, B, I provide a semicircular rib, K, larger than the rib C and concentric therewith. These are placed at each end of the device, and between at suitable distances, if found necessary. Upwardly from these ribs K, I provide hemispherical ribs L, hinged at one side to the piece B, and secured at the opposite side by means of catch M, so that the said rib L may be opened, as shown by the dotted lines L. (See Fig. 1.) This catch M is formed of pieces of spring metal secured to the piece B, and adapted for readily receiving between them the end of the hemispherical rib L or readily releasing it therefrom, and when closed forms a circle with the pendent rib K opposite. These outer ribs, K and L, are designed to rest upon a floor or bench where it is used, so that the device may be turned over without difficulty.

In operating the device the gutter-sections are placed in upon the ribs C, the bead of the gutter-sections bearing within the groove E, and a flange at the opposite side beneath the wing H of the spring F. The catches J are then released, permitting the wings H of the staples G to press downwardly upon the upper face, O, of the flanged gutter-section P, as shown in Fig. 2. Two or more of these sec-

tions are placed within a box, with the edges overlapping each other, and preferably opposite the grooves D, for the purpose of allowing the edges of the gutter-sections to be conveniently reached with the soldering-iron on the lower face of the side pieces, B. The upper inner side of the joint between the sections may then be soldered, after which the device is turned over so as to rest upon the central part of the rib L. By this means the lower or convex side of each of the sections may be effectually soldered. After each of the sections within the box is soldered the springs are raised and held in position by the catches, and if the length so made by uniting the several sections is long enough for desired use the gutter is removed; but if the gutter is to be made longer the portion so formed is pushed forward, leaving only one end within the box, to which the new section can be connected in the way and manner above described.

What I claim is—

1. A gutter-box for tinners, consisting of two parallel side rails, one of which is grooved internally, semicircular ribs connecting said rails, and spring-actuated holders, substantially as described.

2. The combination of the parallel rails, provided with recesses D and connected by straps or ribs, and the staple-shaped spring-holders for the gutter-sections, substantially as described.

3. In a gutter-box for tinners, the combination of the two rails B B, constructed and connected together as described, spring-holders applied to one of said rails, the semicircular supports K, rigidly secured to the ends of said rails, and the semicircular supports L, hinged to the latter, all constructed and adapted to operate substantially as and for the purposes described.

In testimony that I claim the foregoing I have hereunto set my hand, this 22d day of November, 1884, in the presence of witnesses.

CHARLEY F. FILSON.

Witnesses:

S. V. DODGE,

W. B. CABLE.