

Aug. 3, 1926.

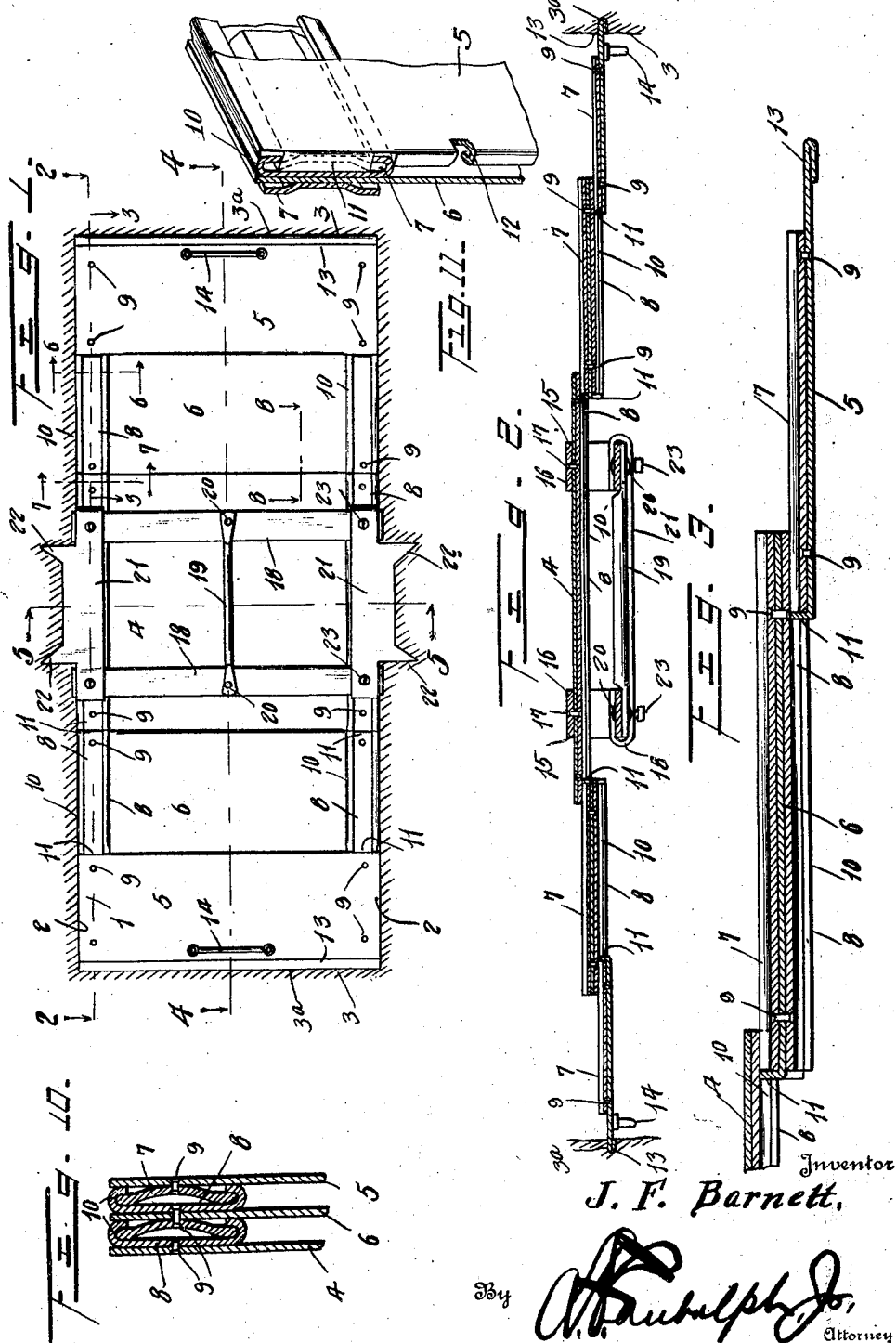
1,594,921

J. F. BARNETT

MINE BRATTICE

Filed May 6, 1925

2 Sheets-Sheet 1



Aug. 3, 1926.

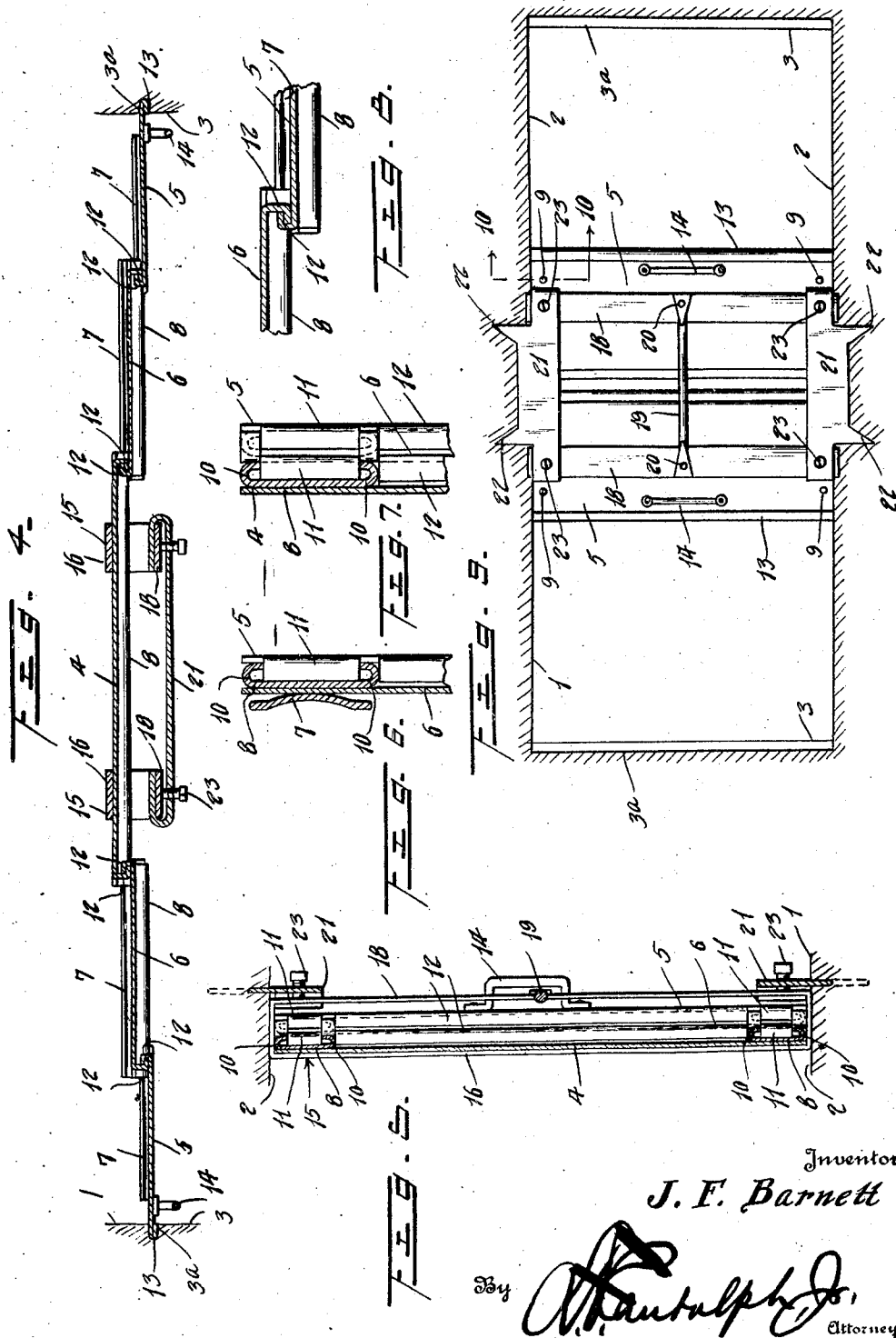
1,594,921

J. F. BARNETT

MINE BRATTICE

Filed May 6, 1925

2 Sheets-Sheet 2



Inventor

J. F. Barnett

By *Handolph J.*
Attorney

UNITED STATES PATENT OFFICE.

JOEL FRANK BARNETT, OF ALVA, KENTUCKY.

MINE BRATTICE.

Application filed May 6, 1925. Serial No. 28,279.

This invention relates to mine brattices, and has for one of its objects to improve and simplify the general construction of devices of this character and to provide one which shall be adapted to be readily and firmly secured in place and which shall be adapted for use in shafts and galleries of different widths.

With the above and other objects in view the invention consists of the construction, combination and arrangement of parts hereinafter fully described and claimed, and illustrated in the accompanying drawings, wherein:

Figure 1 is a view illustrating the application of the brattice;

Figure 2 is a horizontal sectional view of the brattice, the section being taken on the plane indicated by the line 2—2 of Figure 1;

Figure 3 is a detail sectional view on an enlarged scale taken on the plane indicated by the line 3—3 of Figure 1;

Figure 4 is a horizontal sectional view of the brattice taken on the plane indicated by the line 4—4 of Figure 1;

Figure 5 is a vertical sectional view of the brattice taken on the plane indicated by the line 5—5 of Figure 1;

Figures 6 and 7 are detail sectional views taken respectively on the planes indicated by the lines 6—6 and 7—7 of Figure 1;

Figure 8 is a detail sectional view on an enlarged scale taken on the line 8—8 of Figure 1;

Figure 9 is a view similar to Figure 1 with the slidable sections of the brattice opened; and

Figure 10 is a detail sectional view on an enlarged scale taken on the line 10—10 of Figure 9.

Fig. 11 is a detail perspective view taken on line 6—6 of Fig. 1 and corresponds to Fig. 6.

Corresponding and like parts are referred to in the following description and designated in the several views of the accompanying drawings, by similar reference characters.

In the drawings 1 designates the top, 2 the bottom and 3 the side walls of a mine shaft or gallery.

The brattice comprises a central section 4, end sections 5 and intermediate sections 6. These parts are made of sheet metal and are slidably connected together by slides 7 and

guides 8 which extend transversely of said parts and are located near the upper and lower ends of said parts. The slides 7 and guides 8 are secured in place by rivets 9, and the former have their upper and lower edges offset from the parts to which they are secured and snugly fitted in grooves 10 in the guides 8. The guides 8 contact with the sections 4, 5 and 6 and the sections 5 and 6 are provided with angular extensions 11 entering the guides 8. The snug fit of the slides 7 in the guides 8, the contact between the guides 8 and the sections 5 and 6, and the contact between the angular extensions 11 and the guides 8, establish substantially air tight connections between the upper and lower edges of the sections 4, 5 and 6. Between the slides 7 and guides 8 the sections 4, 5 and 6 are provided with angular edges 12 which interlock when the brattice is erected to establish a substantially air tight connection between those portions of the sections situated intermediate the slides 7 and guides 8.

The outer vertical edges of the sections 5 are provided with reinforcing beads 13, and these sections have secured thereto handles 14.

Vertical loops 15 surround the section 4 and have their vertical members 16 secured against one side thereof by rivets 17. The other vertical members 18 of the loops 15 are spaced from the opposite side of the section 4. A handle 19 is secured to the members 18 of the loops 15 by rivets 20, and anchors 21 provided with prongs 22 are slidably mounted upon said members and adapted to be secured in active or inactive position by set screws 23.

When the brattice is in use the upper and lower edges of the sections 4, 5 and 6 contact with the top 1 and bottom 2 of the shaft or gallery, the outer vertical edges of the sections 5 are embedded in grooves 3^a in the sides 3, and the anchors 21 are embedded in the top 1 and bottom 2. If desired concrete may be applied to the top 1, bottom 2 and sides 3 in contact with the brattice so as to prevent air passing by the same or a seal may be effected by securing a wire netting over the entire surface of the brattice and applying cement to the netting. All parts of the brattice are made of metal. As the brattice is collapsible, and as the anchors 21 may be readily moved into and secured in active position, the de-

vice may be readily and quickly erected. The anchors 21 prevent the casual displacement of the brattice.

From the foregoing description, taken in connection with the accompanying drawings, the advantages of the construction of the brattice will be readily apparent to those skilled in the art to which it appertains. While I have described and shown the device which I now consider to be the best embodiment of the invention, I desire to have it understood that such changes may be made when desired as are within the scope of the invention as claimed.

What is claimed is:—

1. A mine brattice comprising a section, vertical members secured to the section, anchors slidably mounted on said members, anchor securing elements, and other sections connected to said first named section.

2. A mine brattice comprising vertical members, anchors slidably connected to said members, and anchor securing elements.

3. A mine brattice having reinforcing loops secured thereto, anchors slidably connected to the loops, and anchor securing elements.

4. A mine brattice comprising sections, guides carried by certain of the sections, slides carried by certain of the sections and fitting in said guides, the sections carrying the slides having extensions fitting in the guides, and said sections having angular edges.

5. A mine brattice comprising a vertical section, means adapted to secure the section to the top and bottom walls of a mine shaft or gallery, and other vertical sections connected to said first section for horizontal adjustment with respect thereto and extending therefrom to the side walls of the mine shaft or gallery.

6. A mine brattice comprising a section, anchors connected to the section for adjustment inwardly and outwardly with respect to opposite edges thereof, and other sections connected to the first named section for adjustment with respect thereto in a direction at right angles to the direction of adjustment of the anchors.

In testimony whereof I affix my signature.

J. FRANK BARNETT.