

953,060.

Patented Mar. 29, 1910.

Fig. 1.

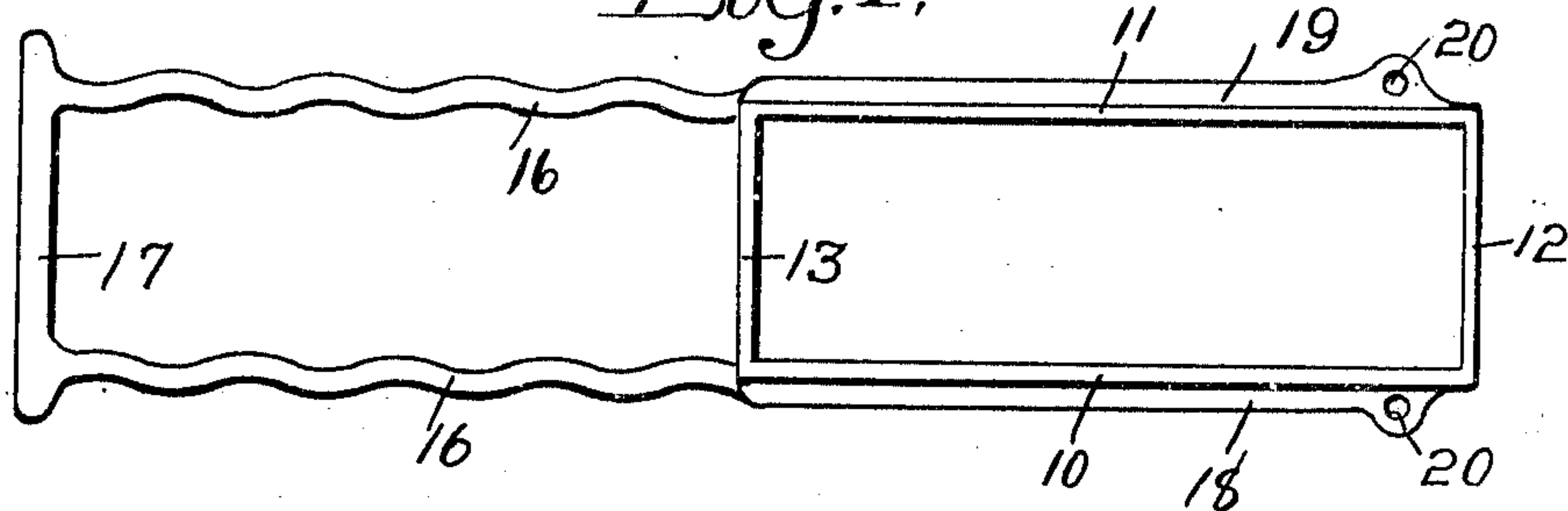


Fig. 2.

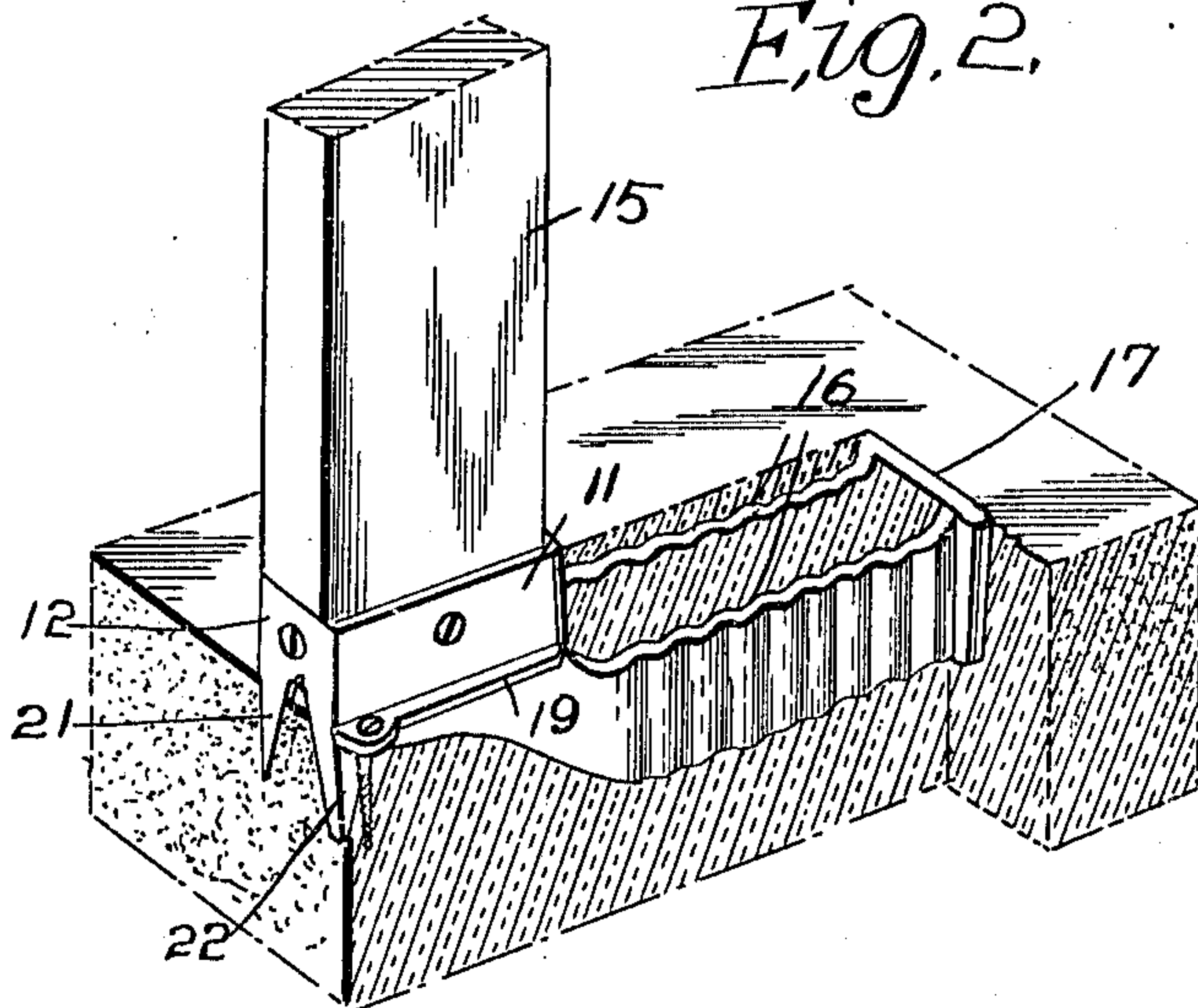
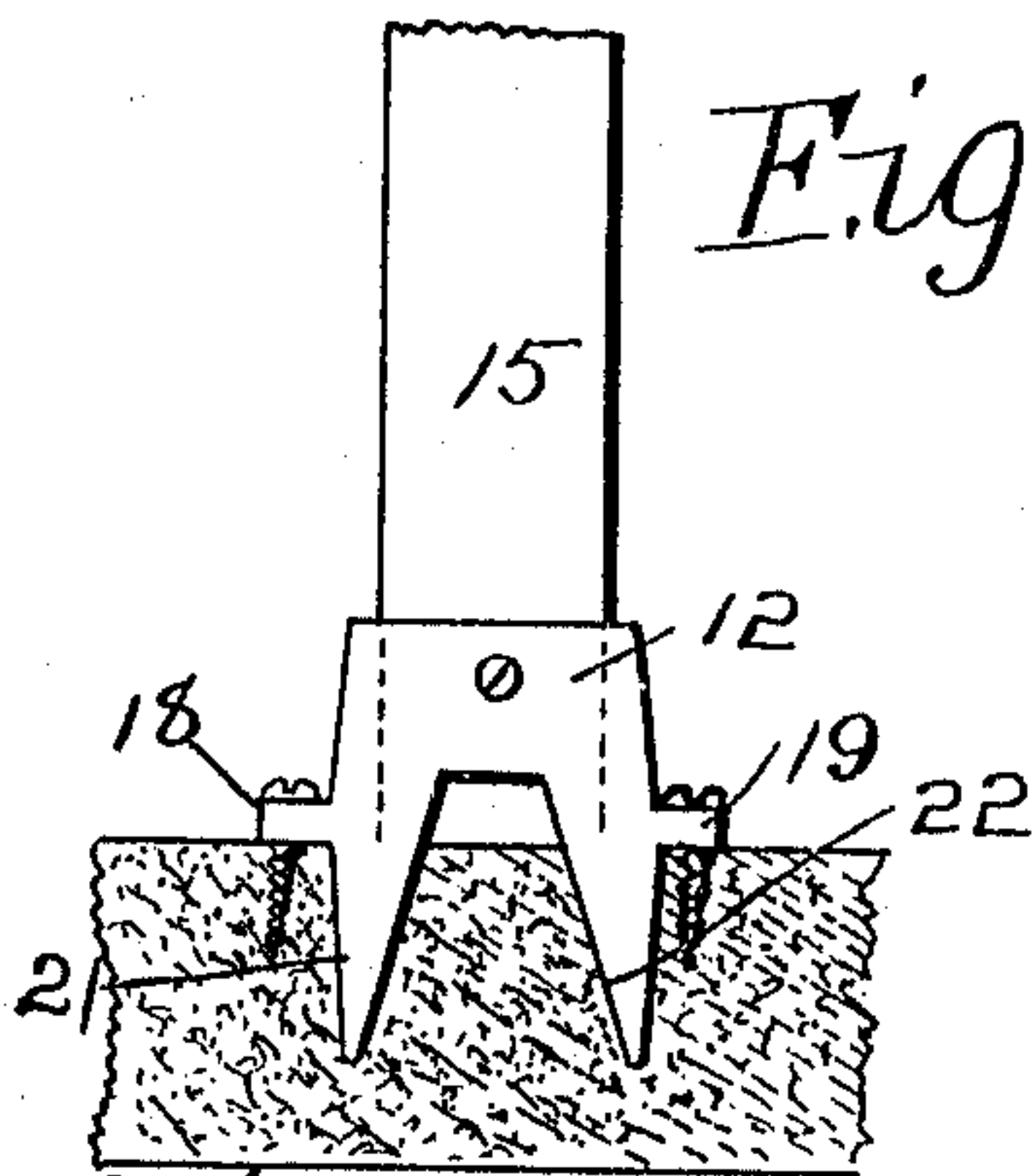


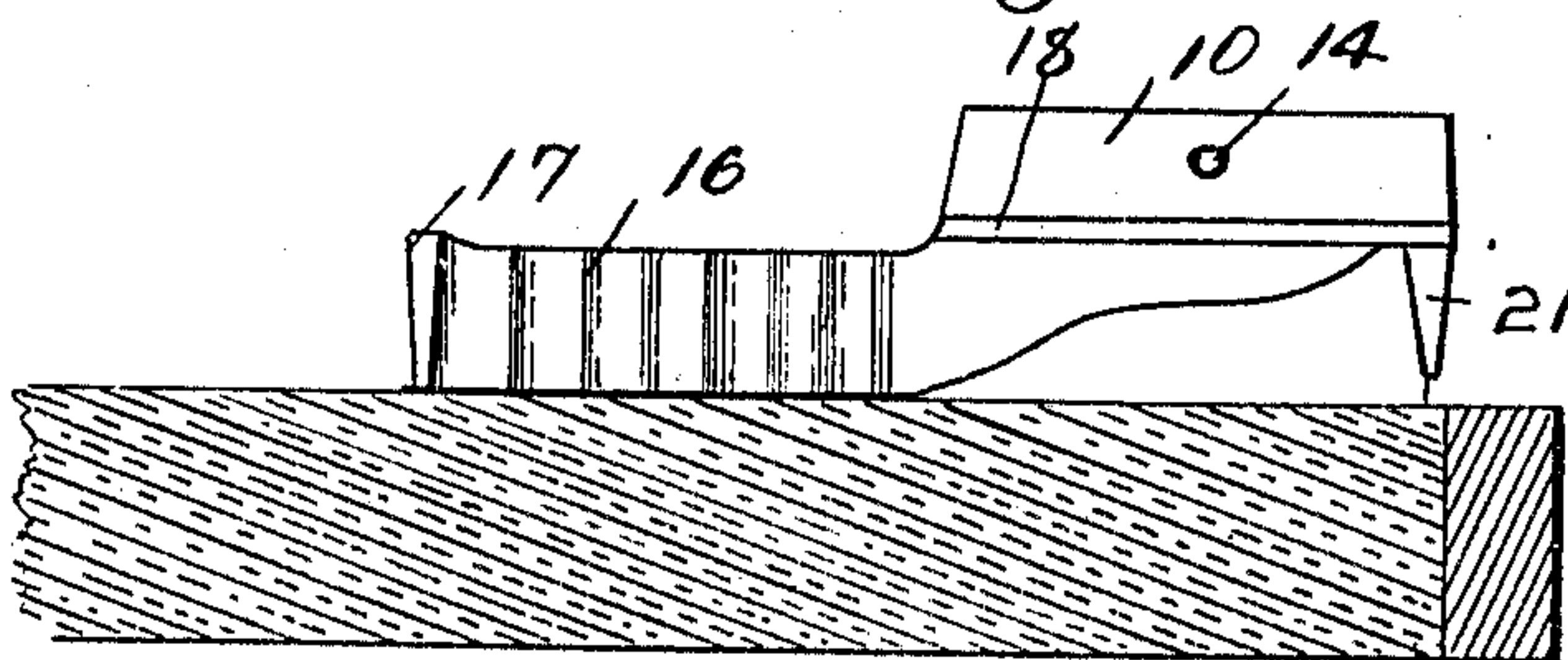
Fig. 3.



Witnesses

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Fig. 4.



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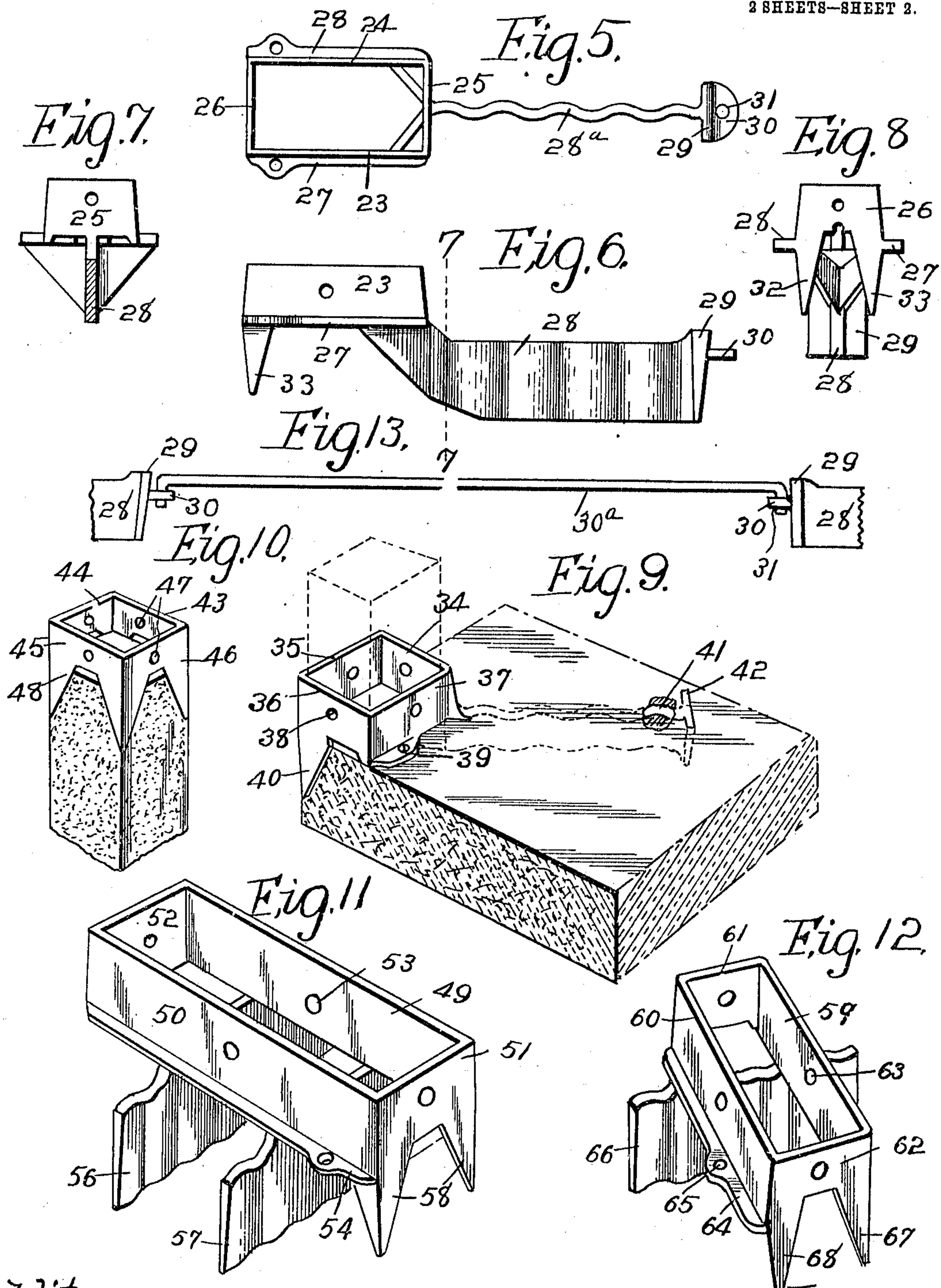
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G. M. ROSS.
 MEANS FOR ATTACHING THE ENDS OF POSTS TO CONCRETE BASES.
 APPLICATION FILED FEB. 18, 1907.

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2 SHEETS—SHEET 2.



Witnesses
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UNITED STATES PATENT OFFICE.

GEORGE M. ROSS, OF GRINNELL, IOWA.

MEANS FOR ATTACHING THE ENDS OF POSTS TO CONCRETE BASES.

953,060.

Specification of Letters Patent. Patented Mar. 29, 1910.

Application filed February 18, 1907. Serial No. 358,148.

To all whom it may concern:

Be it known that I, GEORGE M. ROSS, a citizen of the United States, residing at Grinnell, in the county of Poweshiek and State of Iowa, have invented a certain new and useful Means for Attaching the Ends of Posts to Concrete Bases, of which the following is a specification.

The objects of my invention are to provide means or devices for attaching the ends of posts to concrete bases; the said devices being adapted to be partially embedded in concrete or other plastic material designed to receive, studding, posts, beams or other supporting means in such a way that they will be rigidly secured relative to the concrete or other plastic material without being wholly embedded in it.

A further object is to provide a device of this class that can be readily placed in position when the concrete or other plastic material is soft, and when said material becomes hardened, my device will be firmly and rigidly held by the substance in which it is placed and will be braced against lateral, longitudinal and perpendicular strain.

A further object is to provide a device of this class which can be varied in construction, and which may be made of various materials at the pleasure of the manufacturers, yet which will accomplish the purpose of forming means for maintaining studding, posts, beams and the like in position relative to concrete or other plastic material.

My invention consists in certain details in the construction, arrangement and combination of the various parts of the device, whereby the objects contemplated are attained, as hereinafter more fully set forth, pointed out in my claims and illustrated in the accompanying drawings, in which—

Figure 1 is a plan view of the device. Fig. 2 is a perspective of the device, showing it in position for use. Fig. 3 is an end view of the device. Fig. 4 is a side elevation of the device in the position in which it is placed before it is placed into the concrete. Fig. 5 is a plan view of the first modified form of the device. Fig. 6 is a side elevation of the same. Fig. 7 is a sectional view of the first modified form, taken on the line 7—7 of Fig. 6. Fig. 8 shows the forward end of the first modified form. Fig. 9 is a perspective view of a second modified form in the position in which it is

used. Fig. 10 is a third modified form of the device in position for use. Fig. 11 shows, in perspective, a fourth modified form of the device. Fig. 12 is a fifth modified form of the device, shown in perspective, and Fig. 13 is a side elevation of a rod designed to be used in connecting any two of my devices with each other.

Referring to the accompanying drawings, it will be seen that I have provided a socket comprising two sides 10 and 11, the forward end 12 and the rear end 13. In each of the sides and end portions there is an opening 14 provided, through each of which a screw is inserted for securing the studding or post 15 to it. Integral with the socket is a shank, comprising one or more corrugated sides 16, having at the rear end thereof a stay 17 substantially at right angles to the corrugated sides 16. On the lower, outer portion of the socket and adjacent to the sides 10 and 11 respectively I have provided the flanges 18 and 19, through the forward portion of each of which there is an opening 20, to which a screw or other securing device may be inserted. Extending downwardly from the forward end of the socket are the prongs 21 and 22.

The upper edges of the sides 16 of the shank are preferably below a line drawn through the upper portion of the stay 17, and the lower portion of either of the flanges 18 or 19, so as to allow these sides to be beneath the surface of the concrete when the shank is inserted into it.

When the concrete is soft, the shank and prongs 21 and 22 are inserted into it after having been placed in the position shown in Fig. 4, until the upper edge of the stay 17 is in line or flush with the top surface of the concrete and until the lower surfaces of the flanges 18 and 19 are in contact with the upper surface of the concrete. Screws or other securing means are then driven into the cement through the openings 20. Between the upper portions of the prongs 21 and 22, the forward end 12 of the socket is cut away to allow moisture to escape readily from the interior of the socket. The cement is then retroweled to make a smooth surface around the device and left until thoroughly hardened.

When the cement is thoroughly hardened, the studding, post or beam is inserted into the socket and secured therein by means of screws or other fastening device.

By the use of the above described device, it will be readily seen that studding, posts, beams or other supporting means can be secured rigidly to concrete, and by the use of this device, decay or other deterioration of that portion of the studding, post or beams, which is adjacent to the concrete will be largely obviated.

In the modified form of the device shown in Fig. 5, the socket comprises the two sides 23 and 24, the ends 25 and 26 and the flanges 27 and 28 thereon, each of which has an opening extending through it to receive a securing means. A shank comprising a shank member 28^a is secured to the socket and has a stay 29 at its rear end. There is a flange 30 having an opening 31 extending through it, secured to said stay. There are two prongs 32 and 33, corresponding to the prongs 21 and 22.

In the second modified form of the device, (Fig. 9) the socket is made substantially square, and comprises four sides 34, 35, 36 and 37, each of which has an opening 38 extending through it to receive securing means. There is a small flange 39 on each of the sides 34 and 37, through which there is an opening to receive securing means. There is also a prong 40 substantially V-shaped in cross section extending downwardly from the forward portions of the sides 35 and 36. There is a shank 41 with a stay 42 at its rear end. This modified form of the device is designed, preferably for use at a corner and where a square post is used.

Fig. 10 shows a third modified form of the device comprising a socket having four sides 43, 44, 45 and 46, each having an opening 47 extending through it. At each corner of the socket and extending downwardly therefrom there is a prong 48, substantially V-shaped in cross section. This third modified form of the device is designed to be used at corners or upon the top of a concrete pillar or post.

Fig. 11 shows a fourth modified form of the device comprising a socket having two sides 49 and 50, and the two ends 51 and 52. Each of the sides and the ends has an opening 53 extending through it to receive securing means. On the outside of each side of the socket is a flange 54, each of which has an opening extending through it to receive securing means. Integral with the socket and extending downwardly therefrom is a shank comprising two corrugated members 56 and 57 which are substantially parallel with each other and at right angles to the sides 49 and 50. Extending downwardly from the end 51 are two prongs 58. This fourth modified form is designed to be used in place of the device shown in the original form, as is also the fifth modified form, shown in Fig. 12, which also comprises a

socket having two sides 59 and 60 and two end portions 61 and 62, each of which has an opening 63 extending through it to receive securing means. On each side of the socket is a flange 64 having an opening 65 for securing means. Extending downwardly from the socket and substantially at right angles to the sides 59 and 60 is a corrugated shank 66. Extending downwardly from the end 62 are two prongs 67 and 68.

In use, any of these modified forms may be substituted for the original form, as they all comprise the essential features of my device.

The rod 30^a shown in Fig. 13 is preferably provided with depending end portions, and is employed to connect two of my improved devices; the said end portions being seated in the apertures 31 in the flanges 30 on the stays 29 of the devices.

Having thus described my invention, what I claim is:—

1. A device of the class described, comprising a socket having an opening extending through each of its ends and sides, a flange on each side extending outwardly therefrom, prongs projecting downwardly from the forward end of the socket and having an opening between their upper portions for allowing moisture to escape between them from the socket, and a corrugated shank integral with the socket.

2. A device for the purpose described comprising a vertically-disposed socket adapted to rest on a body of plastic material and having base flanges and apertures therein for the passage of attaching devices, and a vertically-disposed shank fixed with respect to the socket and arranged in a horizontal plane entirely below the base of the socket and extending laterally and horizontally outward from the socket.

3. A device for the purpose described comprising a vertically-disposed socket adapted to rest on a body of plastic material and having base flanges and apertures therein for the passage of attaching devices, vertically-disposed, spaced shanks fixed with respect to the socket and arranged in a horizontal plane entirely below the base of the socket and extending laterally and horizontally outward from the socket, and a stay extending between and connecting the outer ends of the said shanks.

4. A device of the class described, comprising a socket, a shank extending rearwardly and downwardly from the socket and integral therewith and having corrugated sides and projecting ends on the rear portion of the shank, for the purposes stated.

5. A device of the class described, comprising a socket adapted to receive a post or other support, a corrugated shank integral with the socket and extending rearwardly

therefrom, and a rear end portion on the shank extending outwardly from each side of it at substantially right angles thereto, said shank and said rear end designed to be
5 embedded in concrete or other plastic material so that the post inserted in the socket may be rigidly secured in position relative to the concrete.

6. A device of the class described, comprising a socket adapted to receive a post or
10 other support and having an opening in its lower portion to allow moisture to escape from it, a corrugated shank integral with the socket and extending rearwardly and
15 downwardly therefrom, and a rear end portion on the shank extending outwardly from each side of it at substantially right angles

thereto, said shank and said rear end designed to be embedded in concrete or other plastic material so that the post inserted in
20 the socket may be rigidly secured in position relative to the concrete.

7. In a device of the class described, a socket having an opening in its lower portion to allow moisture to escape from it,
25 flanges on the sides of the socket, and a corrugated shank integral with the socket, for the purposes stated.

Des Moines, Iowa, Nov. 16, 1906.

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Witnesses:

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