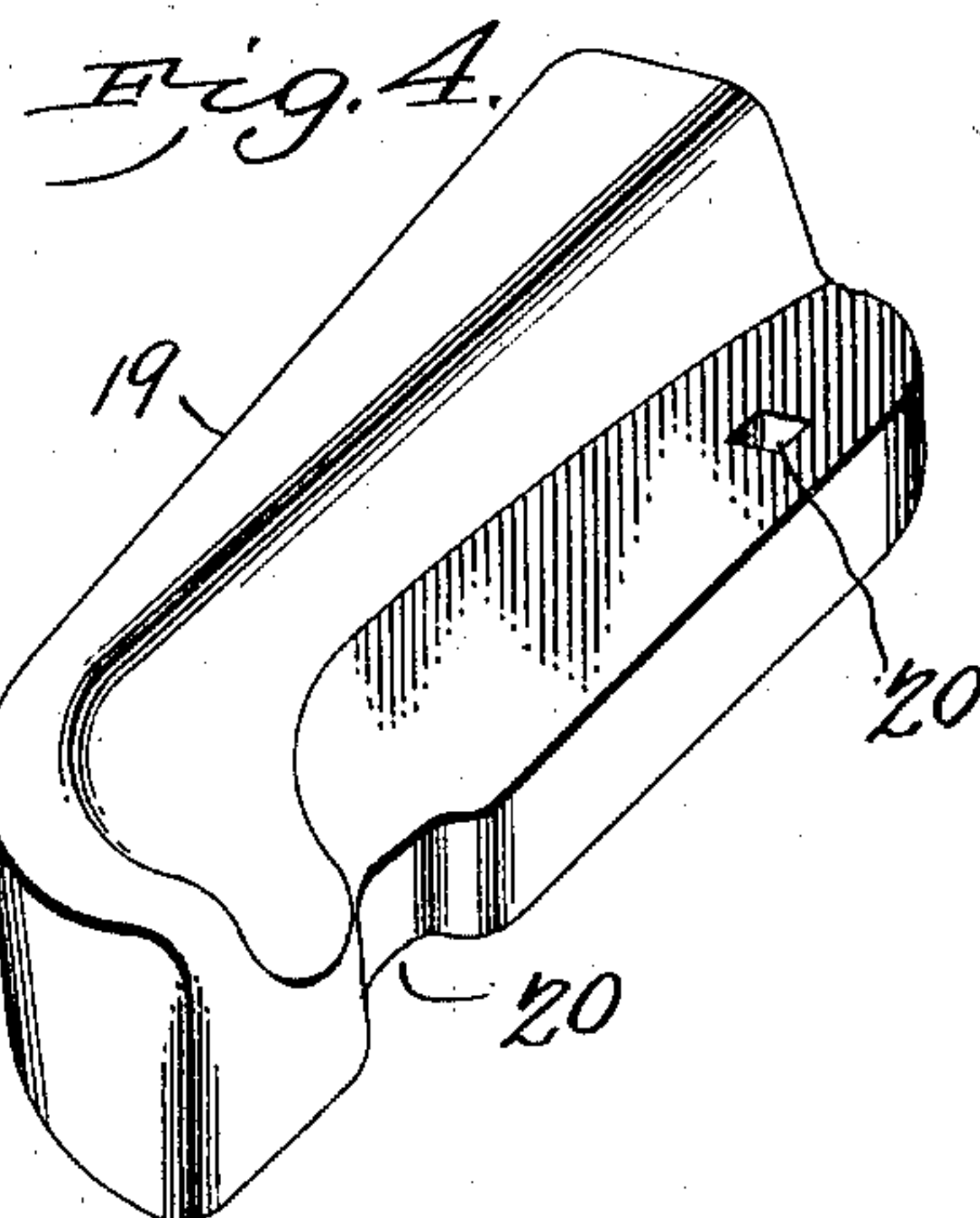
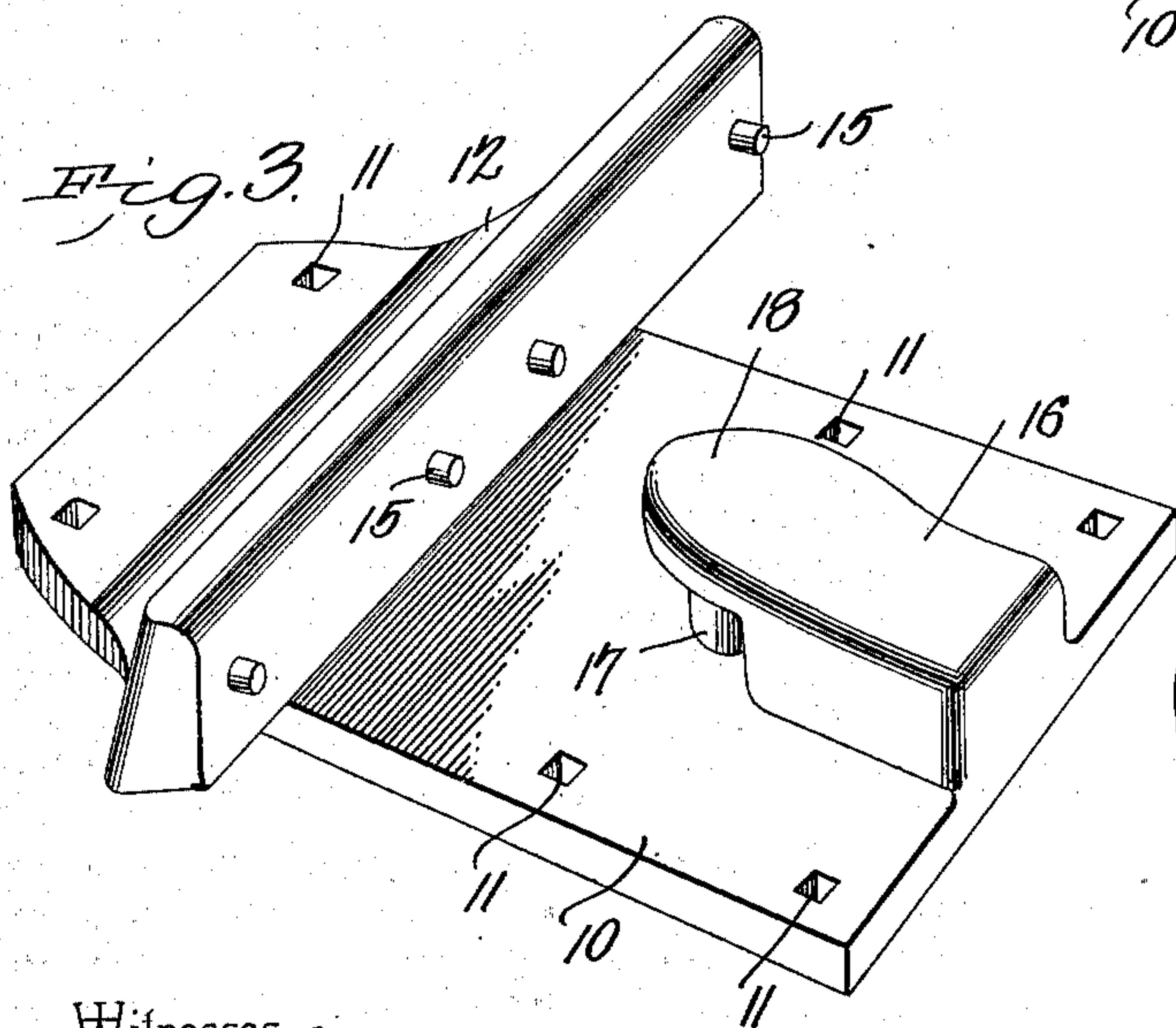
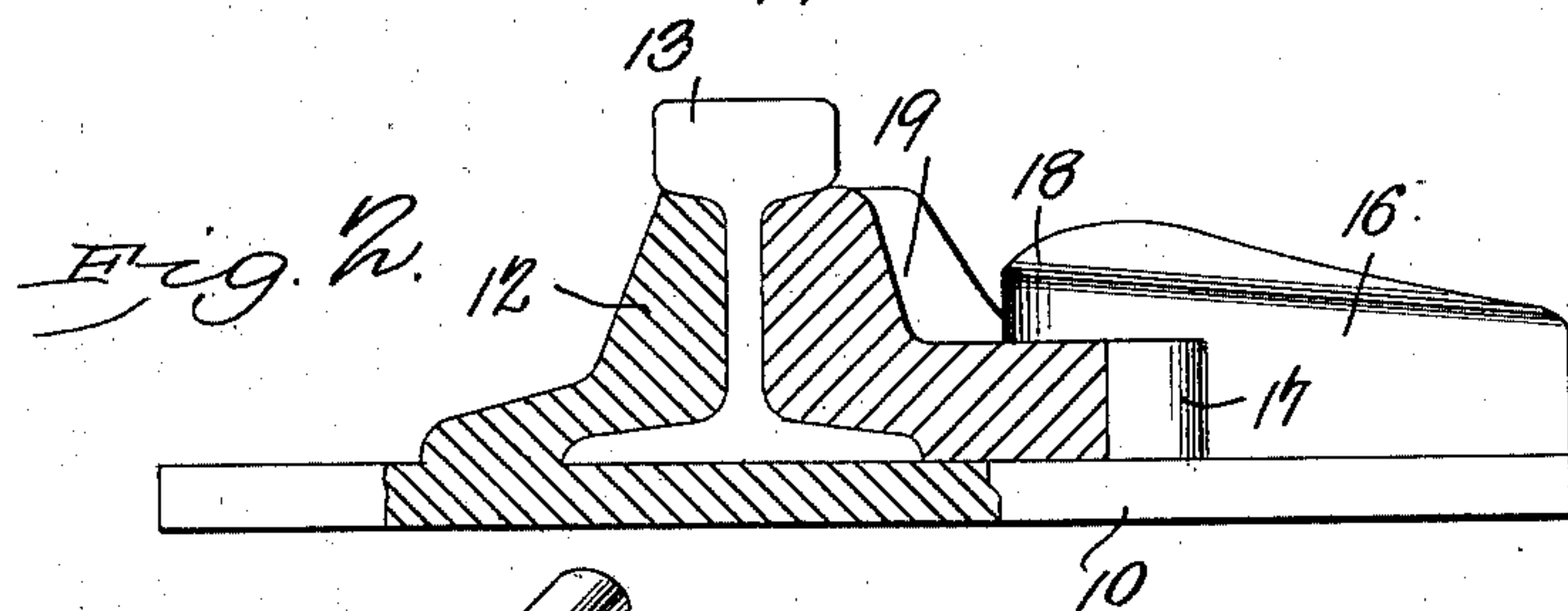
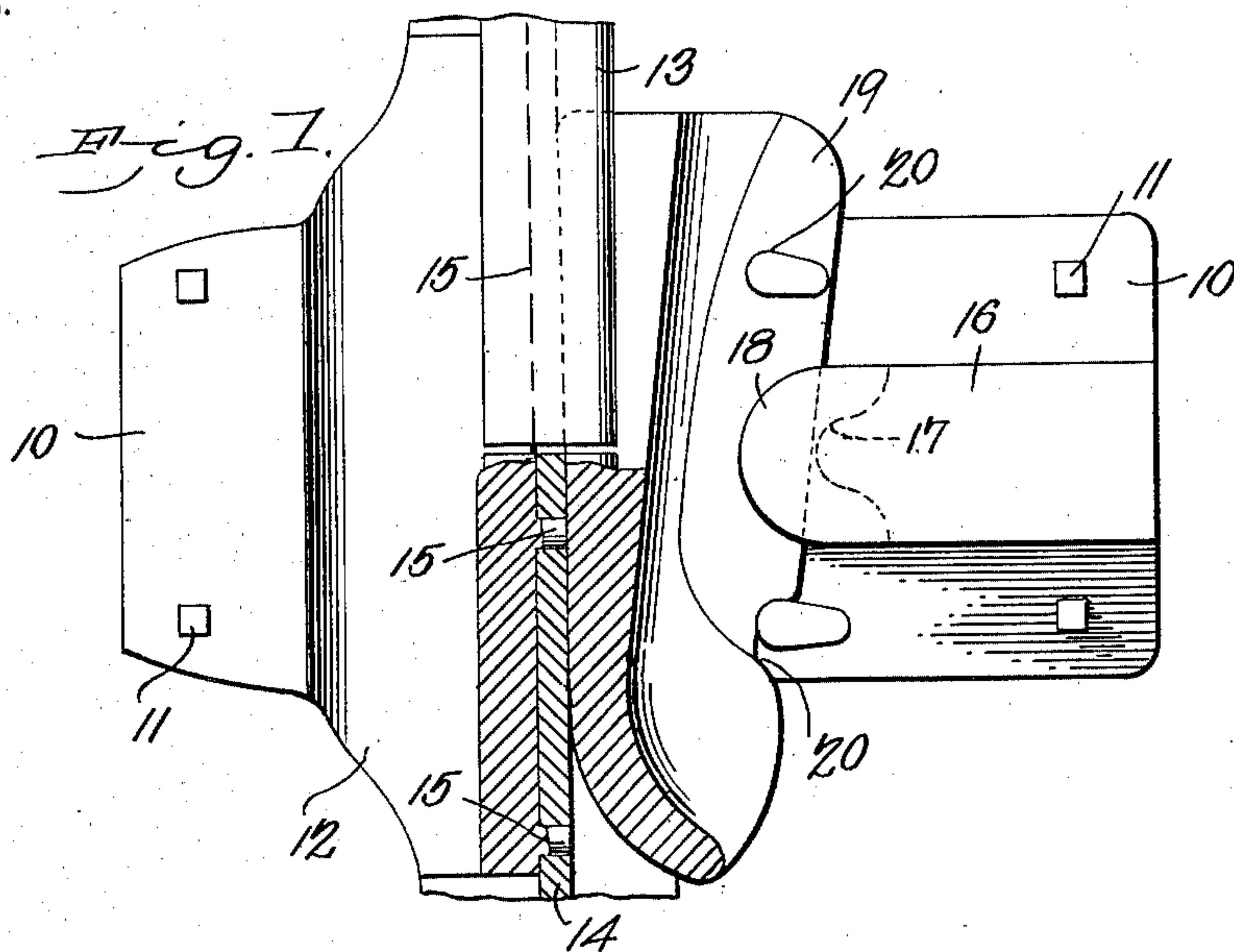


No. 749,449.

PATENTED JAN. 12, 1904.

B. G. RIGGS.
RAILWAY RAIL JOINT.
APPLICATION FILED MAR. 26, 1903.

NO MODEL.



Witnesses
E. J. Stewart
C. H. Woodward

by *B. G. Riggs*, Inventor
C. A. Snow & Co.
Attorneys

UNITED STATES PATENT OFFICE.

BENJAMIN G. RIGGS, OF KINZUA, PENNSYLVANIA.

RAILWAY-RAIL JOINT.

SPECIFICATION forming part of Letters Patent No. 749,449, dated January 12, 1904.

Application filed March 26, 1903. Serial No. 149,726. (No model.)

To all whom it may concern:

Be it known that I, BENJAMIN G. RIGGS, a citizen of the United States, residing at Kinzua, in the county of Warren and State of Pennsylvania, have invented a new and useful Railway-Rail Joint, of which the following is a specification.

This invention relates to railway-rail joints, and has for its object to simplify and improve devices of this character and to produce a joint whereby the abutting ends of two adjacent railway-rails may be firmly secured without using detachable bolts, clamp, or fish-plates.

The invention consists in certain novel features of construction, as hereinafter shown and described, and specified in the claims.

In the drawings illustrative of the invention, in which corresponding parts are denoted by like designating characters, Figure 1 is a plan view, partially in section, and Fig. 2 is a transverse section, of the improved joint applied. Figs. 3 and 4 represent the two parts forming the joint in perspective and disconnected.

The improved device consists of a tie-plate 10, having spaced spike-apertures 11, by which it may be secured to the tie, and with a lug 12, extending upwardly therefrom transversely of the plate and with its ends extended beyond the edges of the plate, as shown. The inner face of the lug 12 will conform to the flanges and vertical webs of the rails (indicated, respectively, at 13 14) and will be provided with spaced studs 15, adapted to enter correspondingly-spaced apertures in the vertical webs of the rails, as indicated in Fig. 1.

Extending from the tie-plate 10 upon the opposite side of the rails from the lug 12 and spaced therefrom is another lug 16, formed with a relatively contracted portion 17 and an overhanging portion 18, the portion 17 disposed opposite the center of the lug 12 and likewise opposite the joint between the rails 13 14, as shown.

Between the lug 16 and the rail ends a wedge-shaped block 19 is adapted to be driven and having its reduced end curved laterally away from the rails and adapted to serve as a lever to force the parts together on its insertion be-

tween the rail ends and the lug 16, the outer edge of the block engaging the portion 17 and the portion 18 overhanging the wedge-block, as indicated. The opposite surface of the wedge-block conforms to the tie-flange and vertical webs of the rails 13 14, as shown in Fig. 2, and when driven "home" between the rails and the lug 16 will forcibly compress the rails against the lug 12 and bind the whole joint firmly together. The wedge-block 19 will preferably be provided with spike-apertures 20, as shown, registering with some of the apertures 11 in the plate 10 to receive spikes, which hold the parts together after the wedge-block is properly placed in position. By this simple means a very compact and rigid joint is formed which will very firmly compress and support the rail ends and render them immovable under the severest jarring and concussions.

The plate 10 and its lugs 12 16 will preferably be cast in one piece of steel and of sufficient strength to withstand the severe strains to which they will be subjected.

The devices will be formed to fit different sizes and forms of rails, as will be obvious.

By this simple arrangement a rail-joint is produced containing only two pieces, the tie-plate with its integral lugs and the wedge-block, thereby dispensing with all detachable bolts and nuts. By this means also the objectionable feature of the nuts becoming loosened by the severe jarring to which this class of devices are subjected is obviated and the construction materially cheapened and its efficiency increased.

Having thus described the invention, what I claim is—

1. A railway-rail joint consisting of a tie-plate having a laterally - extended member adapted to engage the adjacent rail ends upon one side, and provided with a lug arranged opposite said laterally - extended member and spaced therefrom, and a wedge-shaped block adapted for insertion between the opposite sides of the rail ends and said spaced lug, said block having its reduced end curved laterally away from the rails and adapted to serve as a lever.

2. A railway-rail joint comprising a tie-plate having a laterally-extended lug adapted to engage the adjacent rail ends upon one side and with an opposing lug upon said tie-plate
5 opposite said extended lug and spaced therefrom, and having an overhanging upper portion and relatively contracted portion between said overhanging portion and the tie-plate, and a wedge-block adapted for insertion be-
10 tween the rail ends and said contracted por-

tion and beneath said overhanging portion, substantially as specified.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

BENJAMIN G. RIGGS.

Witnesses:

WILLIAM B. WEED,
HENRY J. SCHINDLER.