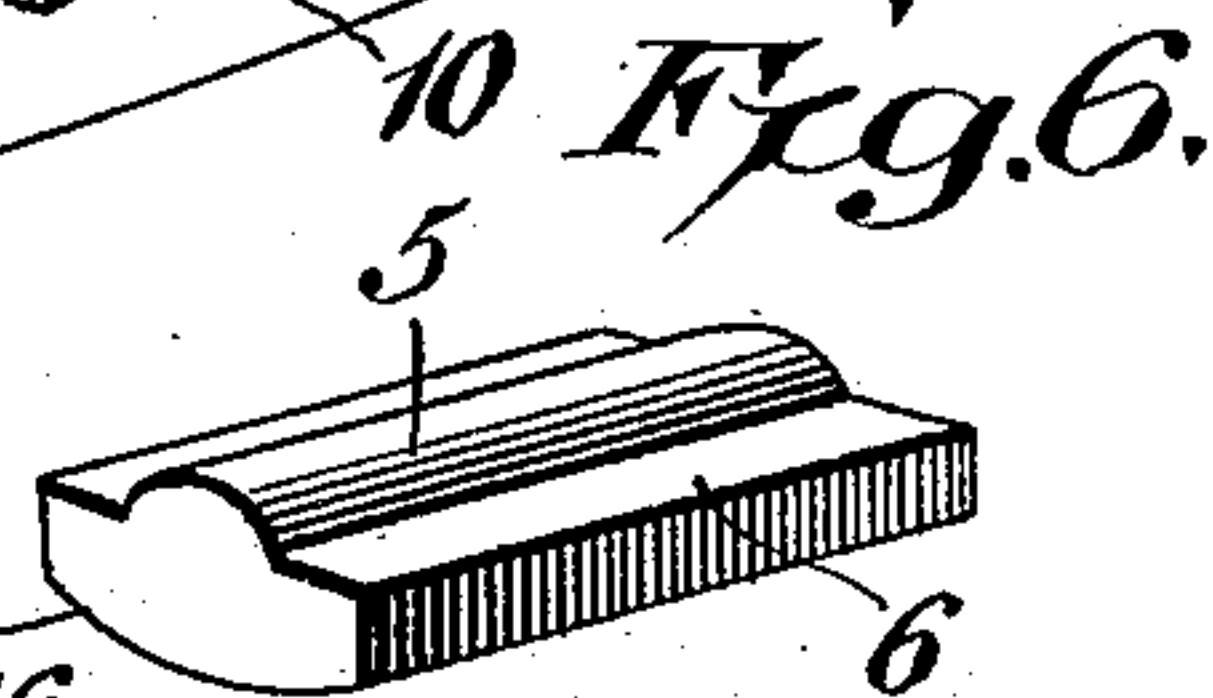
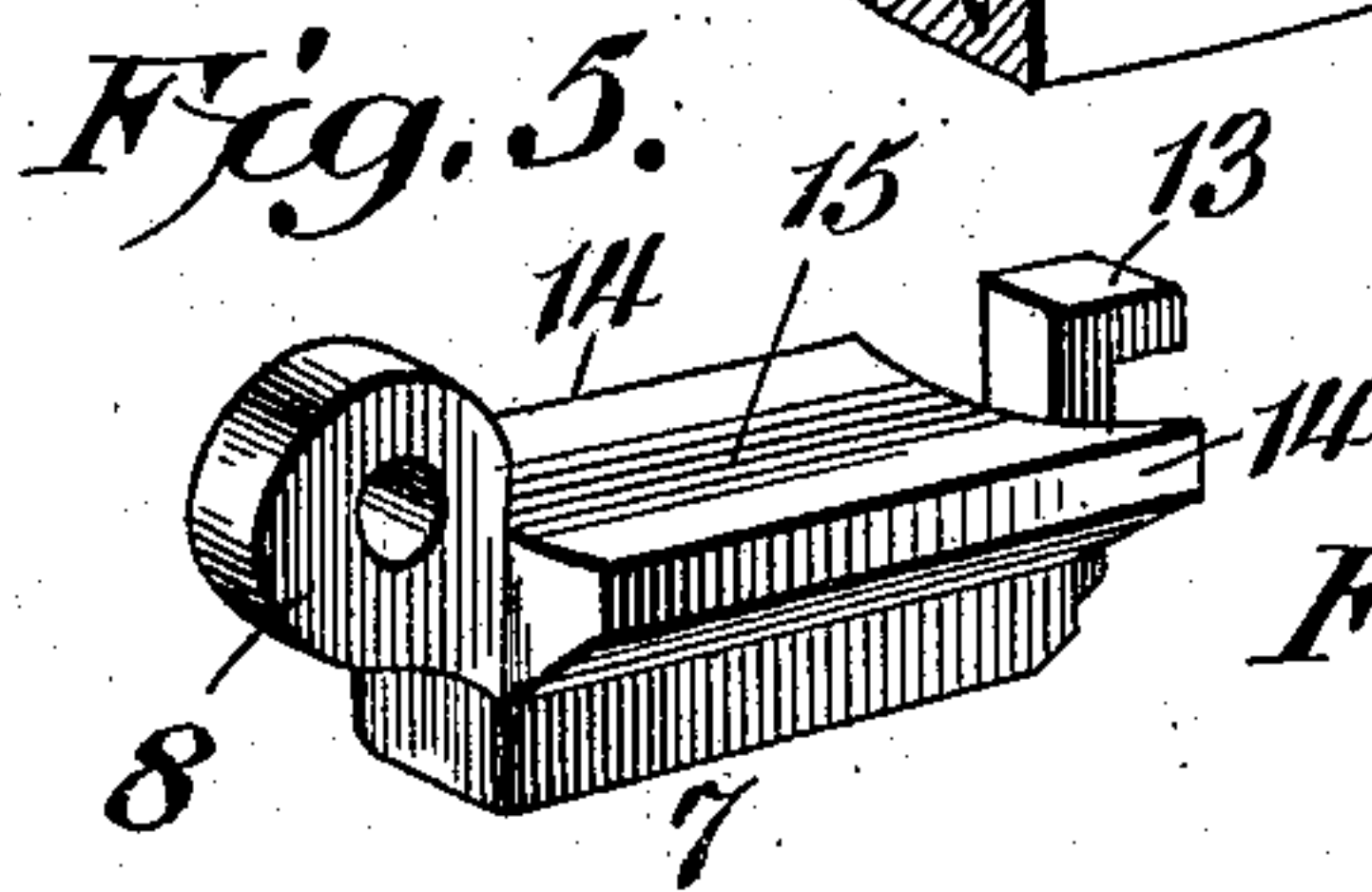
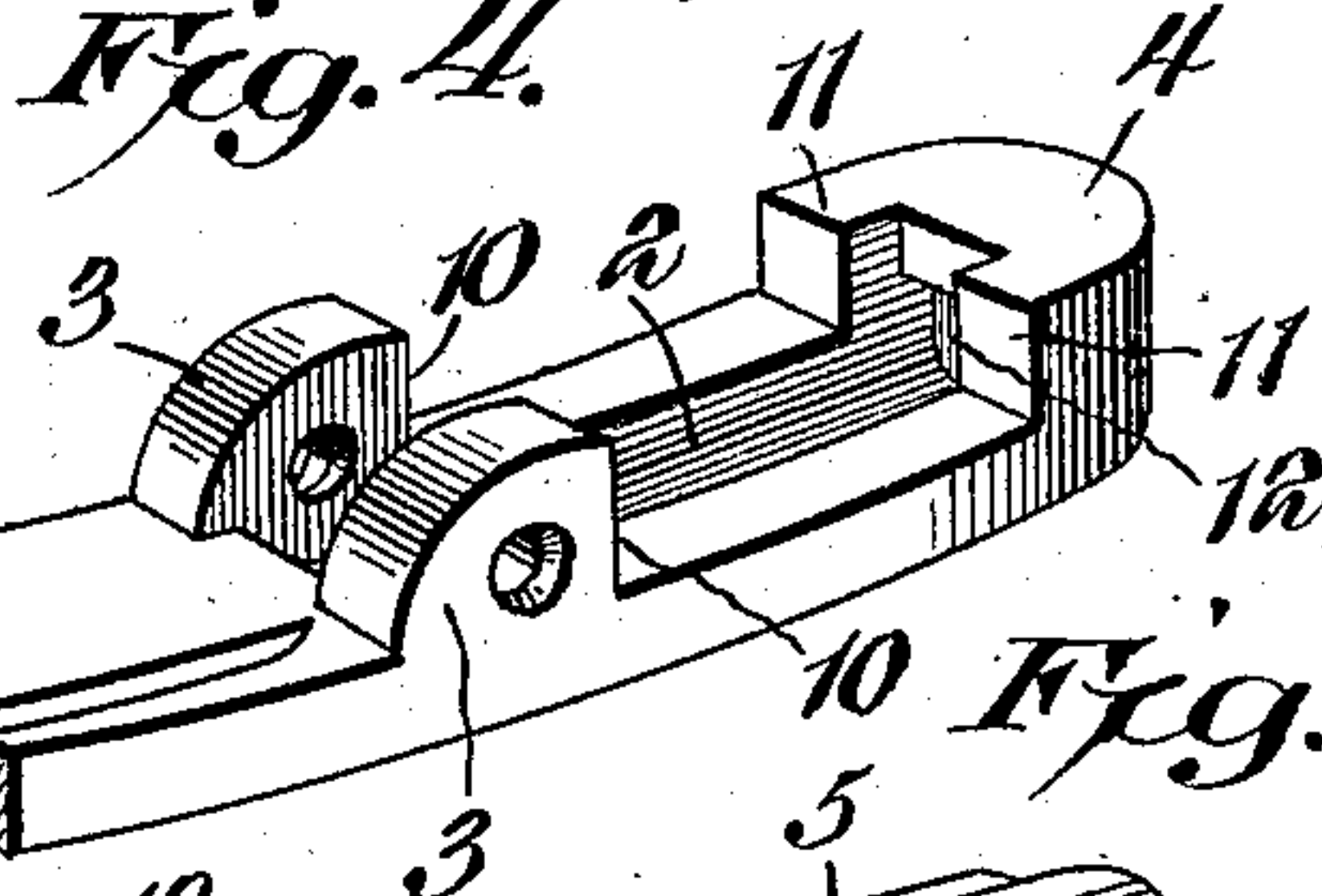
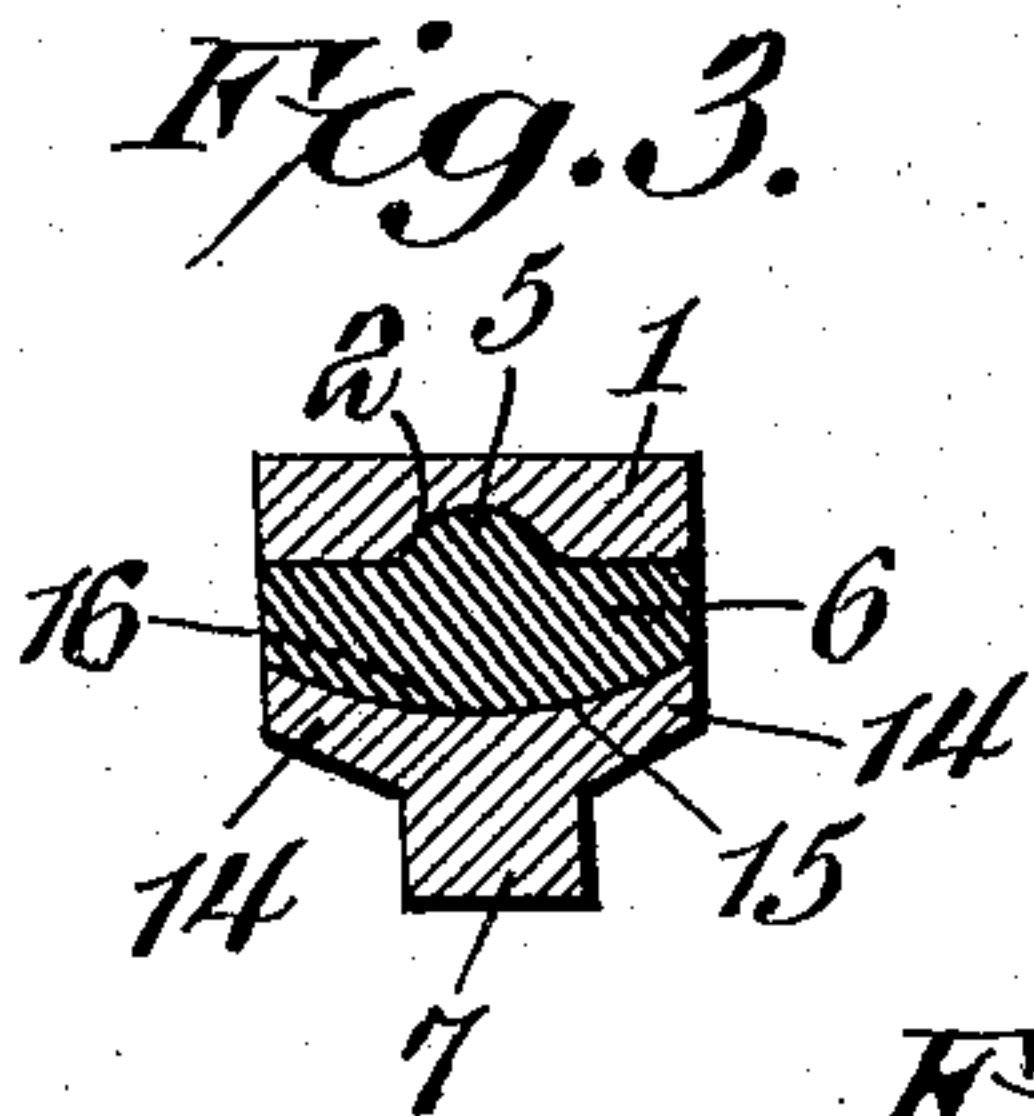
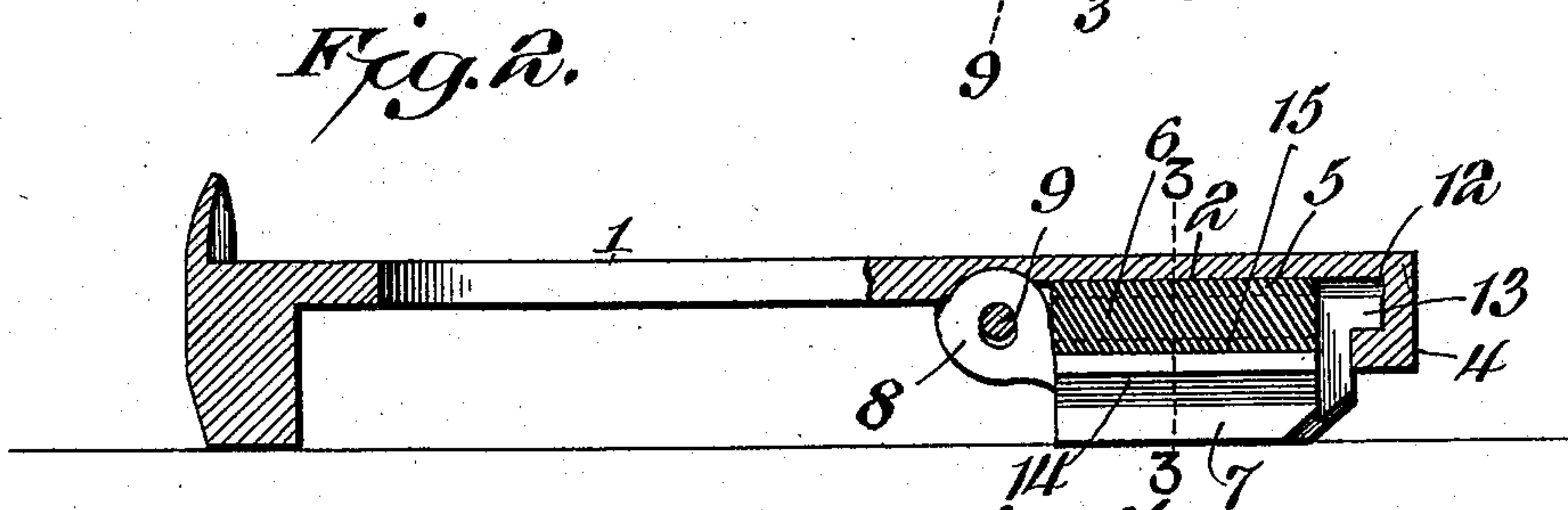
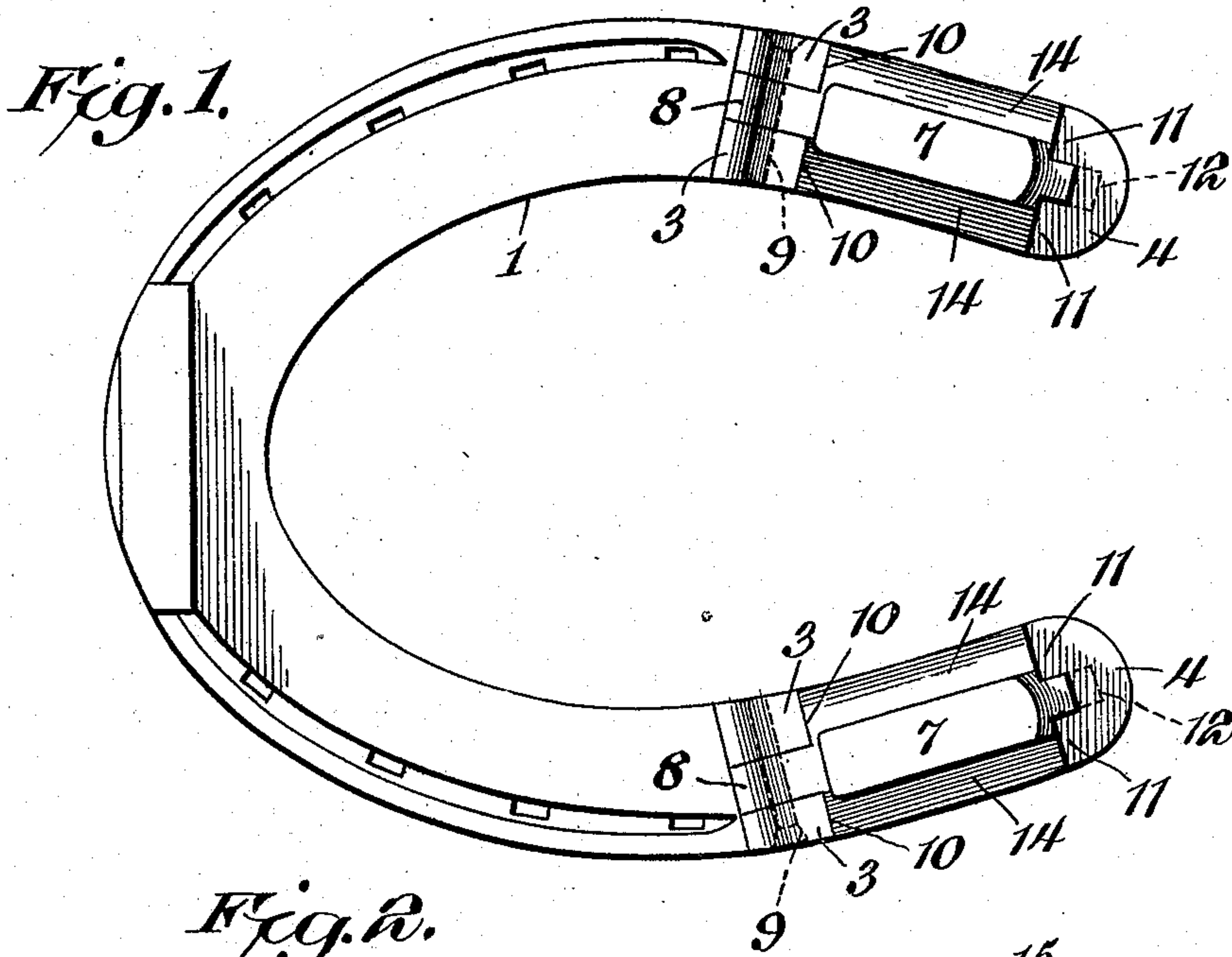


F. STEELMAN.
CUSHIONED HORSESHOE.
APPLICATION FILED OCT. 17, 1908.

911,914.

Patented Feb. 9, 1909.



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UNITED STATES PATENT OFFICE.

FRANK STEELMAN, OF ST. PARIS, OHIO, ASSIGNOR OF ONE-THIRD TO CHARLES S. BOLLINGER
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CUSHIONED HORSESHOE.

No. 911,914.

Specification of Letters Patent.

Patented Feb. 9, 1909.

Application filed October 17, 1908. Serial No. 458,229.

To all whom it may concern:

Be it known that I, FRANK STEELMAN, a citizen of the United States, residing at St. Paris, in the county of Champaign and State of Ohio, have invented a new and useful Cushioned Horseshoe, of which the following is a specification.

The invention relates to improvements in cushioned horse shoes.

The object of the present invention is to improve the construction of cushioned horse shoes, and to provide simple, inexpensive and highly efficient means for cushioning the heel calk to prevent soreness and lameness, and to render much easier the travel of a horse over the hard surfaces of paved streets, roads, etc.

A further object of the invention is to provide a cushioned horse shoe of this character, adapted to admit of easy removal of the heel calks and the cushions without taking the shoe off a horse's hoof.

With these and other objects in view, the invention consists in the construction and novel combination of parts hereinafter fully described, illustrated in the accompanying drawing, and pointed out in the claims here-to appended; it being understood that various changes in the form, proportion, size and minor details of construction, within the scope of the claims, may be resorted to without departing from the spirit, or sacrificing any of the advantages of the invention.

In the drawing:—Figure 1 is a reverse plan view of a horse shoe provided with cushioned heel calks, constructed in accordance with this invention. Fig. 2 is a longitudinal sectional view of the same. Fig. 3 is a transverse sectional view on the line 3—3 of Fig. 2. Fig. 4 is a detail perspective view of one of the heel portions of the horse shoe. Fig. 5 is a detail perspective view of the heel calk. Fig. 6 is a similar view of the cushion.

Like numerals of reference designate corresponding parts in all the figures of the drawing.

1 designates a horse shoe, provided in the lower face of each of its heel portions with a longitudinal groove 2 and having a pair of spaced lugs 3 at the inner end of the groove and provided also at the outer or rear end of the groove with a single lug 4, extending entirely across the rear end of the heel portion. The longitudinal groove 2 is approximately

semi-circular in cross section and presents a transversely concave face to the rounded rib 5 of a cushion 6, which is interposed between the heel portion of the horse shoe and a heel calk 7. The heel calk 7, which may be constructed of any suitable material, is provided at its front end with an ear 8, pivoted between the spaced lugs 3 by a transverse screw 9, or other suitable pivot. The screw passes through registering perforations of the lugs 3 and the ear 8, and the perforation of one of the lugs is threaded to engage the threads of the screw. The head of the screw is preferably counter-sunk in the other lug, as shown. The rear edges 10 of the spaced lugs 3 are vertical, and the rear lug 4 is provided at the front with spaced forwardly projecting walls or extensions 11, which have vertical front faces or edges, arranged in parallelism with the vertical rear edges of the front lugs 3. The rear lug is also provided with a central recess or socket 12, located at the space between the extensions or flanges 11 and having rear, top, bottom and side walls. The recess or socket receives an L-shaped lug 13 of the rear end of the rear calk. The rear lug operates between the flanges or extensions 11 and projects into the socket or recess for limiting the downward or outward movement of the pivoted heel calk.

The heel calk consists of a solid lower longitudinally disposed body portion, provided at the top with side flanges 14, forming lateral extensions, which operate in the recesses or spaces between the front and rear lugs. The front and rear edges of the side flanges 14 fit between the vertical edges of the front and rear lugs, and while there is sufficient space to permit the necessary cushioning movement, the shoulders formed by the lugs are adapted to resist any longitudinal or end thrust of the heel calk and thereby relieve the transverse pivot of strain. The upper face 15 of the heel calk is concave and transversely curved, and the cushion 6, which is constructed of rubber, or other suitable material, is provided with a rounded lower face 16, curved transversely, as clearly illustrated in Fig. 6 of the drawing, to fit the concave upper face of the heel calk. The groove 2 and the rib 5 interlock the cushion with the heel portion of the horse shoe, and this together with the concave upper face 15 of the heel calk and the rounded lower face

16 of the cushion firmly holds the cushion in place and resists any tendency of the cushion to move laterally of the heel portion of the horse shoe. The cushion extends 5 the entire width of the heel portion of the horse shoe, and a maximum cushioning effect is thereby obtained. When the cushion becomes worn and requires renewal, it may be readily removed together with the heel calk 10 without taking the horse shoe off the hoof of an animal.

Having thus fully described my invention, what I claim as new and desire to secure by Letters Patent, is:—

15 1. A horse shoe including a heel portion provided with a longitudinal groove and having spaced lugs at the front end of the same and provided at the rear end with a single lug extending across the heel portion, 20 a heel calk extending entirely across the heel portion and fitted between the front and rear lugs and provided at its front end with an ear arranged between the front lugs, a pivot piercing the ear and the front lugs, 25 and a cushion extending entirely across the heel portion of the horse shoe and interposed between the same and the heel calk and provided at the top with a rib fitting in the groove of the heel portion of the horse shoe 30 and interlocking the cushion with the same.

2. A horse shoe including a heel portion having a longitudinal groove and provided at the inner end thereof with spaced lugs and having a single lug at the rear or outer 35 end of the groove, the latter being provided with a recess or socket and having forwardly projecting side flanges, a heel calk provided at its front end with an ear to fit between the spaced lugs of the horse shoe 40 and having a lug projecting into the socket of the rear lug of the horse shoe and operating between the extensions of the said rear lug, a pivot piercing the front lugs of the horse shoe and the ear of the heel calk, and 45 a cushion interposed between the heel calk and the horse shoe and provided at its upper face with a longitudinal rib fitted in the groove of the horse shoe and interlocking the cushion with the same.

50 3. A horse shoe including a heel portion provided with a longitudinal groove and having lugs at the front and rear ends there-

of, a pivoted heel calk extending entirely across the heel portion of the horse shoe and fitted between the front and rear lugs and 55 having a concave upper face and a cushion interposed between the heel calk and the horse shoe and provided at its upper face with a rib fitting in the groove of the horse shoe to interlock the cushion with the same, 60 the lower end of the cushion being rounded and fitting in the concave upper face of the heel calk.

4. A horse shoe including a heel portion provided with spaced front lugs and having 65 a rear lug, a heel calk provided with side flanges arranged between the front and rear lugs and forming an enlarged top portion extending entirely across the heel portion of the horse shoe, said heel calk being also pro- 70 vided at its front end with an ear fitting between the front lugs, a pivot piercing the ear and the front lugs, and a cushion extending entirely across the heel portion of the horse shoe and interposed between the 75 same and the heel calk and interlocked with one of the said parts, whereby it is held against lateral movement.

5. A horse shoe including a heel portion provided with a longitudinal groove and 80 having spaced front lugs and provided with a single rear lug extending entirely across the heel portion and provided with a socket and having front side extensions, a heel calk provided with longitudinal side flanges ar- 85 ranged between the front and rear lugs and having an ear at its front end to fit between the front flanges, said heel calk being provided with a concave upper face and having a rear lug extending into the recess of the 90 rear lug of the horse shoe, and a cushion interposed between the heel calk and the horse shoe and rounded at the lower face to fit the concave upper face of the heel calk and provided at the top with a rib extending into 95 the groove of the horse shoe, whereby the cushion is interlocked with the latter.

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

FRANK STEELMAN.

Witnesses:

OMER MCARTHUR,
A. C. BOLINGER.