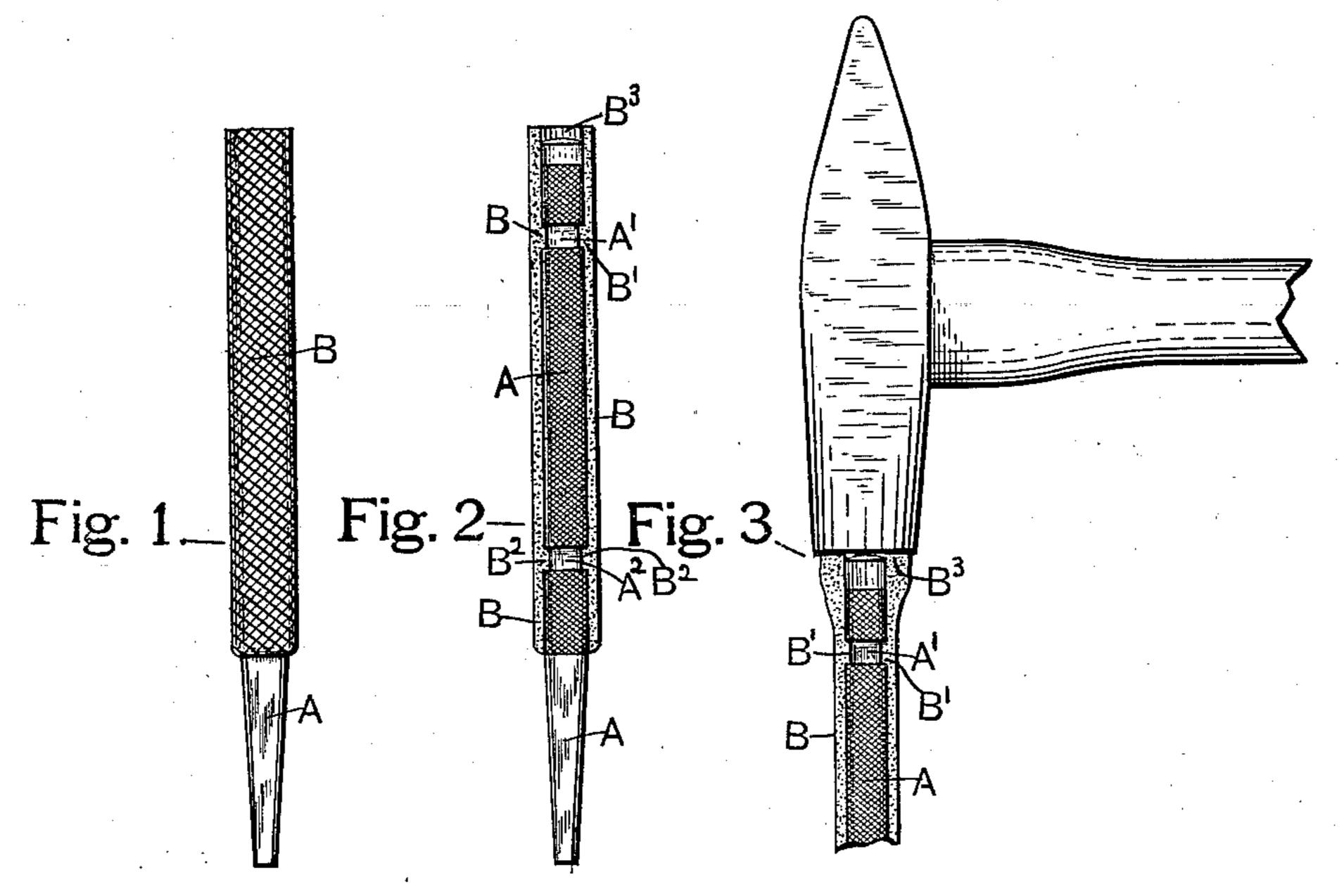
Patented July II, 1899.

## W. FRENCH.

## SHIELD FOR PERCUSSIVE TOOLS.

(Application filed July 30, 1898.)

No Model.)



WITNESSES

AAHale Sannell Tature. INVENTOR
Walter French
BY Oscar Snell
This ATTORNEY

## United States Patent Office.

WALTER FRENCH, OF CHICAGO, ILLINOIS.

## SHIELD FOR PERCUSSIVE TOOLS.

SPECIFICATION forming part of Letters Patent No. 628,455, dated July 11, 1899.

Application filed July 30, 1898. Serial No. 687,347. (No model.)

To all whom it may concern:

Be it known that I, Walter French, a subject of the Queen of Great Britain, residing at Chicago, in the county of Cook and State of Illinois, have invented a new and useful Shield for Percussive Tools, of which the fol-

lowing is a specification.

My invention relates to shields for percussive tools; and my object is to provide a means for not only preventing the transmission of annoying lateral vibrations to the fingers of the hand in the use of such tools, but also to prevent the hammer from slipping off of the head of the tool when struck at an ansle to the longitudinal center thereof, as is described hereinafter and illustrated in the

accompanying drawings, in which—

Figure 1 is an elevation of a percussive tool which may be used for a nail-set and which 20 is provided with a shield in which is embodied my invention. Fig. 2 is an elevation of the tool, with the shield thereon broken away at one side to illustrate simple means for holding the shield in position and also shows the pro-25 jection of the shield beyond the end of the tool, whereby it may be contacted by the hammer before the latter contacts the end of the tool. Fig. 3 is a side elevation of a hammer and a portion of the handle thereof and of 30 the top end portion of a tool, with a portion of the shield in section and in the compressed condition it will assume at the instant when the hammer contacts the top of the tool in delivering a blow.

5 Similar letters indicate like parts through-

out the several views.

The body of the tool as shown in this instance is roughened on the surface by cross-hatching and in addition is provided with pe-

40 ripheral grooves A' and A2.

The shield B is preferably made of some elastic material—such as rubber or rubber in combination with a suitable amount of fibrous or inelastic material which may add to its durability—and is molded to form a tube having interior projecting annular collars (indicated at B' and B<sup>2</sup>) which are adapted to

fit into grooves A' and A<sup>2</sup>, which, together with the cross-hatching, are adapted to prevent the longitudinal movement of the shield 50 on the tool by the ordinary action of the hammer, with the exception of a portion of the top thereof. A top end portion B<sup>3</sup> of the shield projects beyond the end of the tool for the purpose of holding the face of the hammer by frictional contact in position to strike an angular blow on the end of the tool without slipping therefrom.

It is obvious that many other methods may be adopted to fasten the shield to the tool 60

than the one hereinbefore described.

I prefer to make the shield of almost pure rubber, so that it may not only effectually prevent the transmission of the rapid stinging vibrations to the fingers incident to the use of 5 percussive tools, but such material is adapted to being easily removed when it is necessary to heat or repair a tool and be replaced without injury. The cushioned blow caused by the projection of the shield serves not only to 70 prevent the hammer slipping, but also prevents the transmission of any very great amount of the hammer vibrations to the tool, as may be easily shown in practice where tools are provided with or without the cushion 75 projection.

I claim as my invention—

A shield for percussive tools consisting of a flexible elastic covering at the sides thereof, and held in position by internal projections 80 adapted to fit into corresponding depressions in the tool, both ends of the tool exposed and the cover projecting beyond one of the ends thereof, and serving in the manner and for the purpose substantially as hereinbefore 85 shown and described.

In testimony that I claim the foregoing I have hereunto set my hand this 23d day of

July, 1898.

WALTER FRENCH.

In presence of—
OSCAR SNELL,
WARREN P. CURRY.