J. SMITH.

PROTECTOR FOR CUTTING TOOLS.

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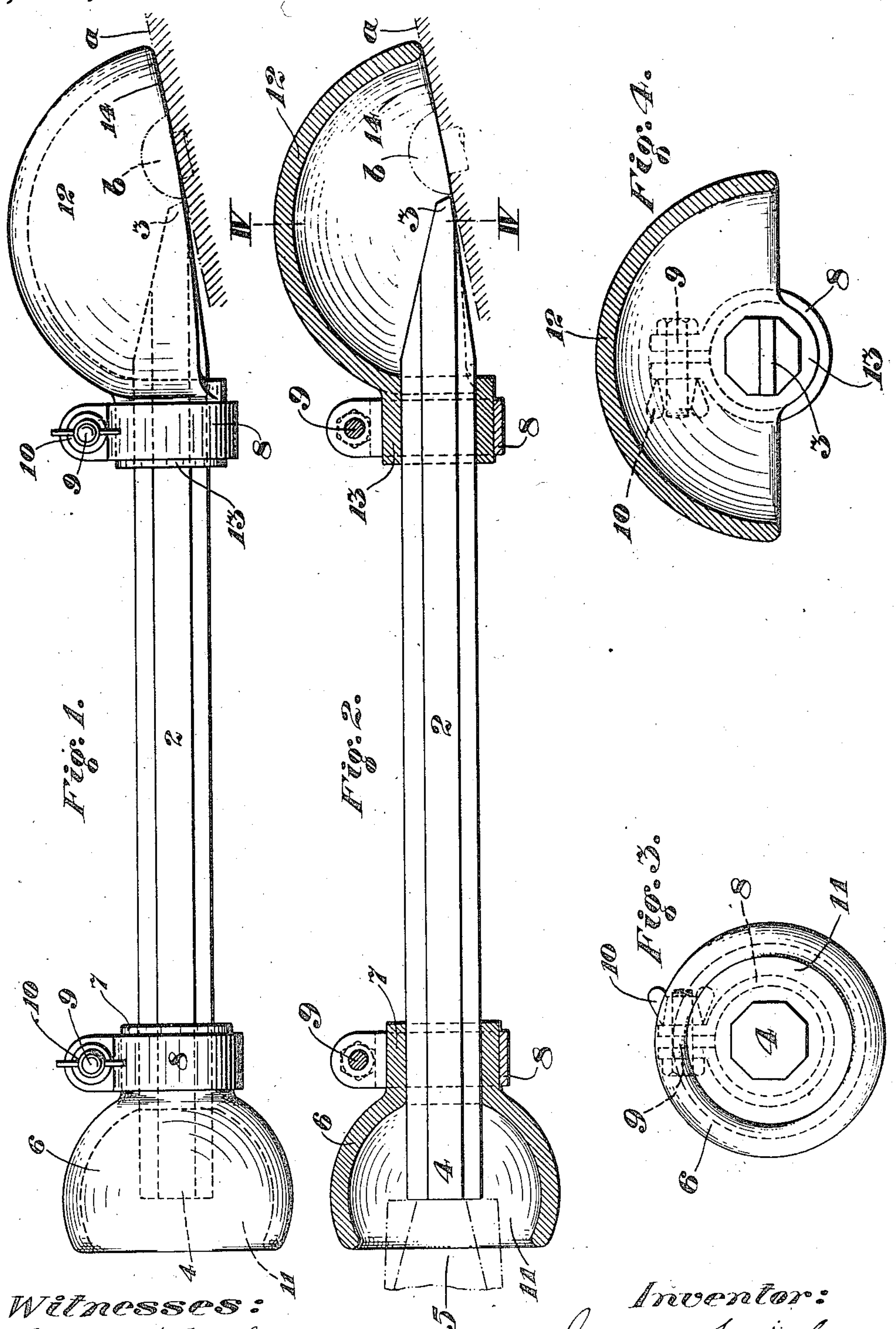
1,069,486.

Patented Aug. 5, 1913.



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UNITED STATES PATENT OFFICE.

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PROTECTOR FOR CUTTING-TOOLS.

1,069,486. Specification of Letters Patent. Patented Aug. 5, 1913.

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To all whom it may concern:

Be it known that I, JAMES SMITH, a citizen of the United States, residing at Wall, in the county of Allegheny and State of Pennsylvania, have invented certain new and useful Improvements in Protectors for Cutting-Tools, of which the following is a specification.

My invention relates to an improved device for the purpose of preventing the escape of metallic chips, etc., in connection with the cutting of rivet heads and other metallic objects by a cold chisel.

Ordinarily, in the cutting of rivet heads, etc., the edge of the chisel is held against the base of the head by the workman, and a hammer applied to the other end of the chisel in the usual way. Such operation frequently results in accidents, either to the workman himself, or to others in the neighborhood, by reason of the rivet or small metallic pieces becoming loose and flying through the air and causing injury, loss of eye-sight, etc.

My invention has in view to provide a simple and efficient device for covering the particular rivet head being operated upon, adapted to be secured to the operative end of the tool and to embrace the rivet head.

It also relates to a covering device for the other end of the chisel, whereby to accomplish the same objects at the point of impact of the hammer and the chisel.

One preferred form of the invention is illustrated in the accompanying drawings in which—

Figure 1 is a view of the device in side elevation, in operative position. Fig. 2 is a similar view, the protecting device being shown in section. Fig. 3 is a rear end view of the hammer end of the cold chisel, showing the protecting cup. Fig. 4 is a cross section indicated by the line IV. IV. of Fig. 2.

In the drawings, the cold chisel 2, which may be octagonal, or of other suitable shape in cross section, is provided with the cutting end or edge 3 and the rear end 4, adapted to receive the blows of the hammer 5. At the hammer end, I provide a cup 6 which may be of rubber or other suitable flexible material, not liable to injury by being accidentally struck by the hammer, a neck portion 7 of which is adapted to be clamped around the shank of the chisel by means of a clamp 8. Said clamp is provided with a tightening screw 9 having a thumb nut terminal 10 by which it may be readily adjusted to position longitudinally of the chisel, and there fixedly held.

The cup 6 is of generally spherical form, as shown, having an opening 11 of sufficient size to freely admit the hammer 5, and extending outwardly beyond the clamping neck 7 sufficiently far to completely embrace the end of the chisel and the head of the hammer, and to interrupt the travel of any free particles of metal.

At the chipping end, the chisel is provided with a similar device consisting of a substantially semi-spherical cup 12, also of rubber or other suitable flexible material, of sufficient thickness to provide a good resisting body portion. The cup 12 is likewise provided with a clamping neck 13 adapted to be held in place by a similar clamp 8 having the screw 9 and thumb nut 10, as shown.

The cup 12 is located with its under edge 14 substantially in alinement or parallelism with the cutting edge 3 of the chisel and is adapted to lie flatly upon the surface *a* of the metal plate or other article having the rivets to be chipped.

Due to its shape and flexibility, it will be seen that the chisel 2 may be adjusted at a suitable angle with relation to the rivet head *b* and surface *a* to effect the cutting operation, the cup completely inclosing these parts and effectively preventing the forcible escape of metallic chips, etc.

It will be understood that the device may be used with other implements of the same nature, or with pneumatic chip-tools, cutters, chisels, etc., and also that the specific form and design of the device may be changed or varied by the skilled mechanic, but that all such changes are to be considered as within the scope of the following claims.

What I claim is:

1. A protector for chipping tools comprising a cup-shaped shield of pliable material having an open side for application to the working surface over which an object is to be chipped, and an integral portion for attachment to the tool, substantially as set forth.

2. A protector for chipping tools comprising a cup-shaped shield of pliable material having an open side for application to the working surface from which an object

is to be chipped and an integral embracing neck for a chipping tool, substantially as set forth.

3. The combination with a chipping tool, of a protector having a bulbous body portion open at one side and an integral neck embracing the tool and secured thereto, substantially as set forth.

4. The combination with a chipping tool, of a protector having a bulbous body portion open at one side and an integral neck embracing the tool, and a securing clamp, substantially as set forth.

5. A protector for chipping tools consisting of a cup-shaped shield of pliable material having an open side for application to a working surface and an integral portion of pliable material adapted to fit tightly around the non-cylindrical shank of the tool and to be fixedly clamped thereon, substantially as set forth.

6. A protector for chipping tools consisting of a cup-shaped shield of pliable material having an open side for application to a working surface and an integral portion of pliable material adapted to fit tightly around the non-cylindrical shank of the tool and to be fixedly clamped thereon and to hold the shield in position around the upper side of the working end of the tool, substantially as set forth.

In testimony whereof I hereunto affix my signature in the presence of two witnesses.

JAMES SMITH.

Witnesses:
C. M. CLARKE,
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