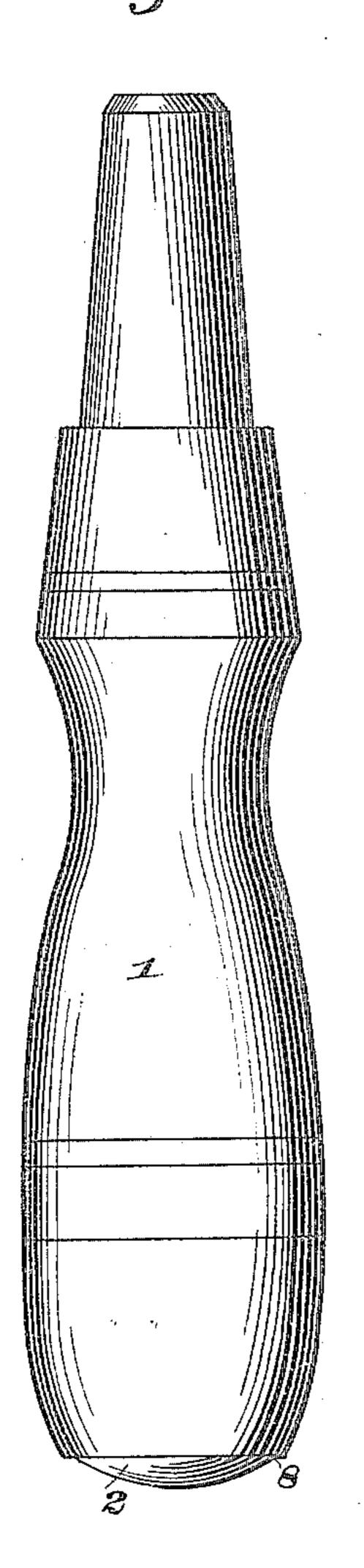
(No Model.)

W. H. GAGE.
HANDLE FOR CHISELS.

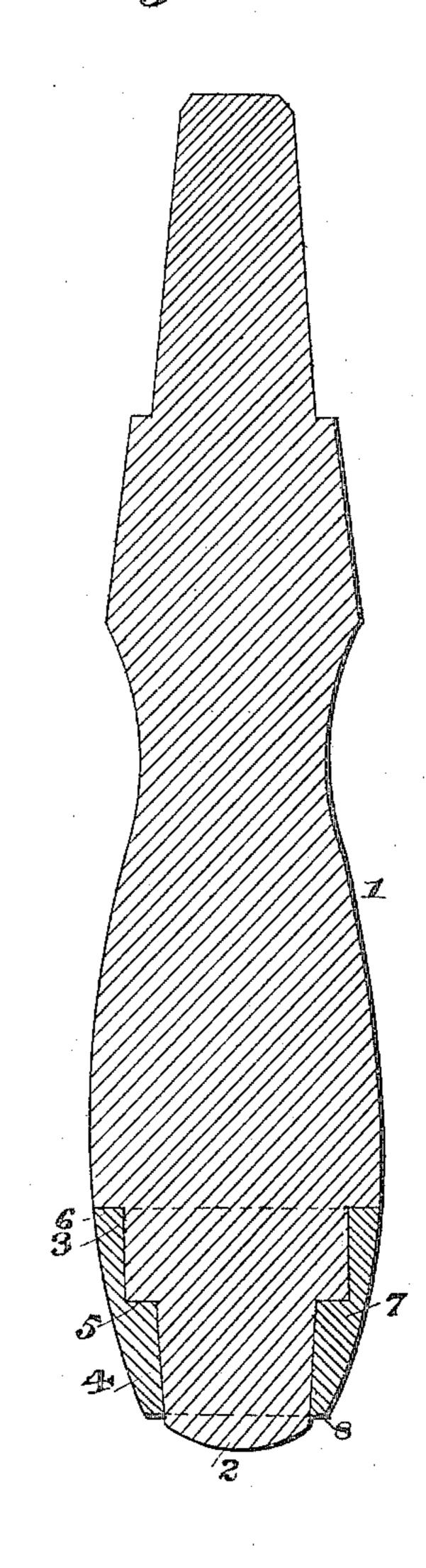
No. 446,442.

Patented Feb. 17, 1891.

Frig. 1



Hig. 2.



Wifnesses

By Fis Attorneys,

Inventor Walter H. Gage.

United States Patent Office.

WALTER H. GAGE, OF WEST FITCHBURG, MASSACHUSETTS.

HANDLE FOR CHISELS.

SPECIFICATION forming part of Letters Patent No. 446,442, dated February 17, 1891.

Application filed August 14, 1890. Serial No. 361,970. (No model.)

To all whom it may concern:

Be it known that I, WALTER H. GAGE, a citizen of the United States, residing at West Fitchburg, in the county of Worcester and 5 State of Massachusetts, have invented a new and useful Handle for Chisels, of which the following is a specification.

This invention has relation to improvements in handles for chisels and other tools 10 to which blows are to be applied; and the objects in view are to provide for an ample protection for the ends of the handles, whereby they retain their form against spreading and breaking, and yet at the same time to permit 15 of the hammer or mallet coming in contact with the wood of the handle at each blow in lieu of against the metal protector or ferrule, so that the face of the hammer or mallet is not injured, and what resiliency or flexibility 20 there is in the wood is preserved.

With the above objects in view the invention consists in the specific features of construction hereinafter referred to, and particu-

larly pointed out in the claims.

Referring to the drawings, Figure 1 is a side elevation of a handle constructed in accordance with my invention. Fig. 2 is a longitudinal vertical section of the same.

Like numerals of reference indicate like 30 parts in all the figures of the drawings.

In constructing the handle the stock of wood from which it is to be formed is placed upon the lathe and the handle turned to give it the usual shape, preferably leaving the butt, or what would be the upper end, convexed.

1 designates the handle, and 2 the convexed upper end or butt, and at the said end of the handle I form two annular recesses 3 and 4, 40 the upper recess 4 being smaller than the lower recess 3. By reason of the formation of these recesses I provide an upper shoulder 5 and a lower shoulder 6, both of which are annular.

7 designates a cylindrical ferrule of an exterior shape and size to coincide with and form a continuation or completion of the handle. The ferrule is hollow and open throughout its length, and is provided with a central 50 annular internal shoulder 7, which is formed by the upper reduced portion 8. When the ferrule is mounted upon the handle, the lower I specified.

edge or base of the ferrule rests upon the shoulder 6 of the handle, and the internal annular shoulder 7 abuts against and rests 55 upon the shoulder 5 of the handle. The cap is not quite as long as from the butt of the handle to the shoulder 6, so that the convexed portion 2 of said handle projects through the upper end and slightly beyond the ferrule 60 and is adapted to receive the blows of the hammer or mallet. The upper portion 4 of the handle is preferably slightly tapered, as may also be the lower portion 3 thereof, so that a driving-fit is formed between the fer- 65 rule and the handle, and the fiber of the handle is snugly embraced and compressed by the ferrule, and thus all danger of splitting or chipping of the handle is avoided.

From the above construction it will be ap- 70 parent that I secure all the advantages accruing from a wooden handle—namely, lightness, cheapness, and elasticity when the blow is delivered—and yet at the same time secure all the advantages without the disadvantages 75

of a metal ferrule or protector.

I am aware that it is common to provide handles with metal protectors for the purpose of receiving the blow and preventing mashing of the end of the handle, and there- 80 fore do not broadly claim such as my invention; but by forming the annular recesses and shoulders I secure a better resistance between the handle and protector, and by tapering the upper recess a driving-fit is ob-'85 tained, and by convexing the upper end of the handle contact of the face or hammer with the handle is insured.

If desired, the reduced portion 3 may be tapered slightly, as in the portion 4.

Having thus described my invention, what I claim is—

1. The herein-described handle having the annular recesses 3 and 4, forming the shoulders 5 and 6, and having the upper convexed 95 end and the metal ferrule or cap open throughout its length and slightly shorter than from the lower shoulder to the upper end of the handle, whereby the convex butt 2 projects beyond the metal cap, and having an inter- 100 nal reduced portion 8, forming the intermediate shoulder 7, fitting and abutting against the shoulder 5 of the handle, substantially as

2. The herein-described wooden handle having a convexed butt provided with the lower and upper recesses 3 and 4, the latter smaller than the former and the two forming the shoulders 5 and 6, and the metal cap or ferrule open throughout its length and slightly shorter than the distance from the shoulder 6 to the extreme convexed end, whereby the convex butt 2 projects beyond the metal cap, and provided with the reduced portion 8 and shoulder 7, said reduced por-

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tion being slightly tapered to agree with the taper of the reduced portion 4 of the handle, substantially as specified.

In testimony that I claim the foregoing as 15 my own I have hereto affixed my signature in presence of two witnesses.

WALTER H. GAGE.

Witnesses:
JOHN DORAN,
H. A. CREHORE.

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