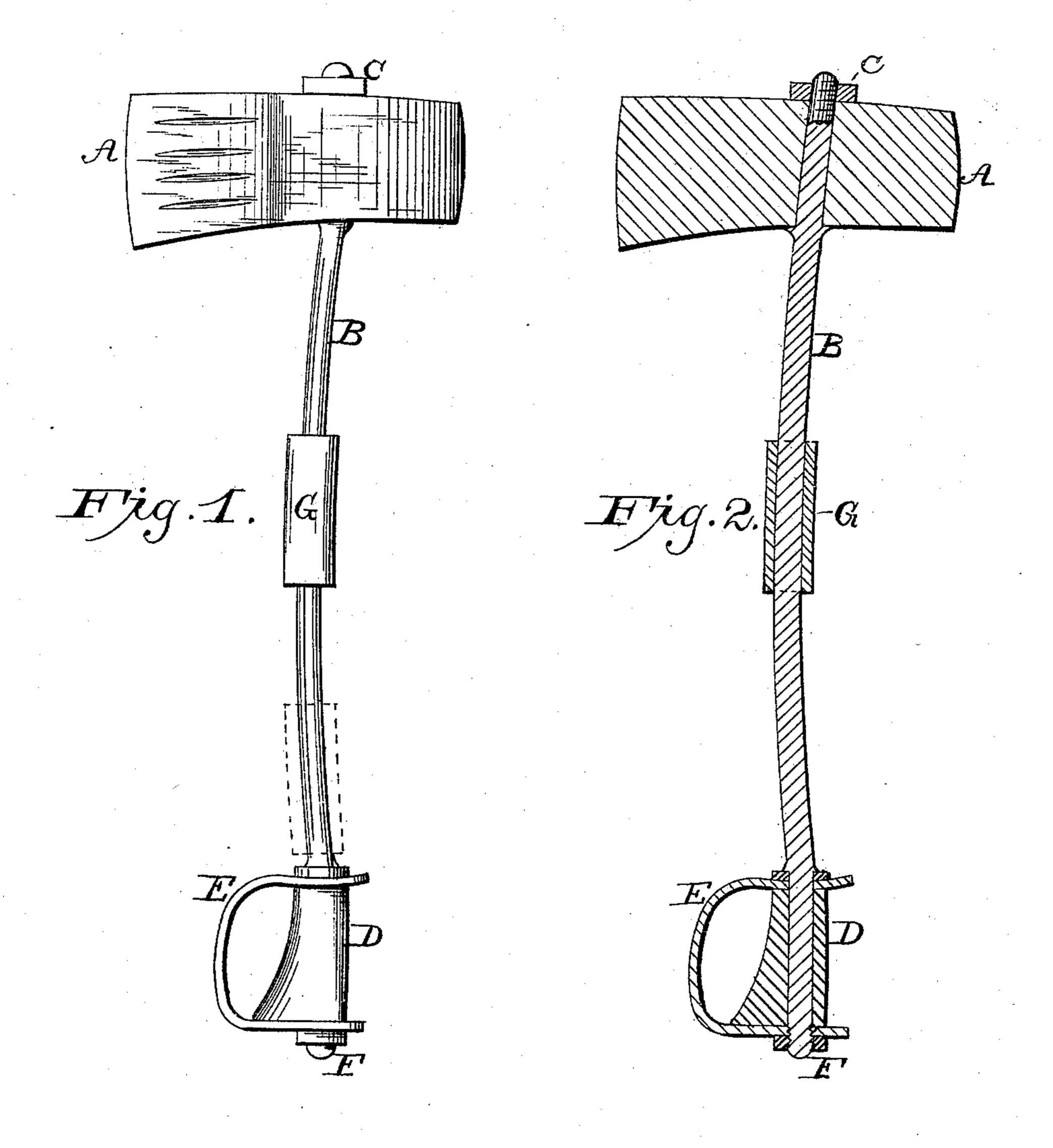
(No Model.)

## J. D. BLAKER.

AX HANDLE.

No. 271,303.

Patented Jan. 30, 1883.



Witnesses: A.M. Burnham. Nom Turner.

Inventoz: John I Blaker. By T. J. W. Robertson Attorney

## United States Patent Office.

JOHN D. BLAKER, OF NEWTOWN, PENNSYLVANIA.

## AX-HANDLE.

SPECIFICATION forming part of Letters Patent No. 271,303, dated January 30, 1883.

Application filed October 20, 1882. (No model.)

To all whom it may concern:

Be it known that I, John D. Blaker, a citizen of the United States of America, residing at Newtown, in the county of Bucks and State of Pennsylvania, have invented certain new and useful Improvements in Ax-Handles, of which the following is a specification, reference being had therein to the accompanying drawings.

This invention relates to ax-handles; and it consists mainly in the production of a metallic spring-handle, and, secondly, in certain details of construction whereby the main feature is suggestable construction.

ture is successfully carried out.

In the accompanying drawings, Figure 1 represents a side view of an ax constructed according to my improvement, and Fig. 2 a vertical section of the same.

A represents an ordinary ax, except that the eye is smaller, in which is fitted the handle B, made preferably of spring-steel, with its upper end squared to fit the eye of the ax, and provided with a nut or burr, C, by which it is secured therein. The lower end is also squared, and has a grip, D, and a loop, E, fastened on

it by a nut or burr, F.

At G is a sliding grip, formed of leather, vulcanized rubber, canvas, or other suitable material, fitting the handle loosely, and of such 30 size as to be readily and conveniently clasped in the hand, which grip is slipped on the handle before the lower grip is put on. This sliding grip will be found to be of the greatest usefulness in connection with the spring-han-35 dle, for a spring-handle is necessarily too small to be conveniently grasped or held in the hand, and if it were cased to secure a good hand-hold the casing would interfere with its elasticity, and the sliding grip is therefore a 40 prime necessity in connection with a springhandle, and, moreover, it saves the hands from the blistering caused by the ordinary wooden handles until the hands get calloused or hardened.

In using the ax the lower grip, D, is grasped with one hand and the sliding grip G by the other, which, being held firmly in the hand, slips up and down the handle as the ax is

raised and lowered in chopping.

50 The metallic spring handle will be found to be very advantageous in use, as besides the advantage due to the spring in making the cut, the metallic handle being of much smaller diameter than a wooden one, there is less resistance in passing through the air, and the

ax will therefore be driven farther into the wood with the same amount of labor, and, moreover, the spring-handle will save the chopper's hands from much of the shock felt by them at each blow, which although compara- 60 tively slight at each stroke, yet in the course of a day's chopping tells severely on a man's powers, especially with young or inexperienced choppers.

Irrespective of the mechanical advantages of a metallic spring handle, it has economic advantages also, for, although the first cost may be more, as the metallic handle is practically indestructible, one handle can be used on many different axes, as it will outwear 70 many, and as the eyes of the axes and the squared part of the handle will always be of the same size it will be only necessary to unscrew the nut to remove one ax and replace it with another, which can be readily and 75 solidly fastened by again screwing on the nut.

I do not intend to limit myself to handles made of steel, round in cross-section, as other forms may be used, such as oval, tubular, cruciform, square, hexagonal, or other polygonal form; nor do I limit myself to steel, as spring-brass may be used.

Although I have described the sliding handgrip as made of flexible material, yet it is obvious that it may be of hard material, such as 85 wood or metal.

I am aware that metallic handles have been used for various tools, and therefore make no claim, broadly, to a metallic handle.

What I claim as new is—

1. The combination of a metallic ax-handle, having one end adapted to be held by one hand of the operator, with a sliding grip constructed to be grasped by the other hand and move along the handle when the blow is 95 given, substantially as and for the purpose specified.

2. The combination, with a spring ax handle, B, of the fixed enlarged grip D and tubular sliding grip G, constructed to move along 100 the handle when the blow is given, all constructed and arranged substantially as described, and for the purpose specified.

In testimony whereof I affix my signature, in presence of two witnesses, this 18th day of October, 1882.

JOHN D. BLAKER.

Witnesses:

T. J., W. ROBERTSON, F. O. MCCLEARY.