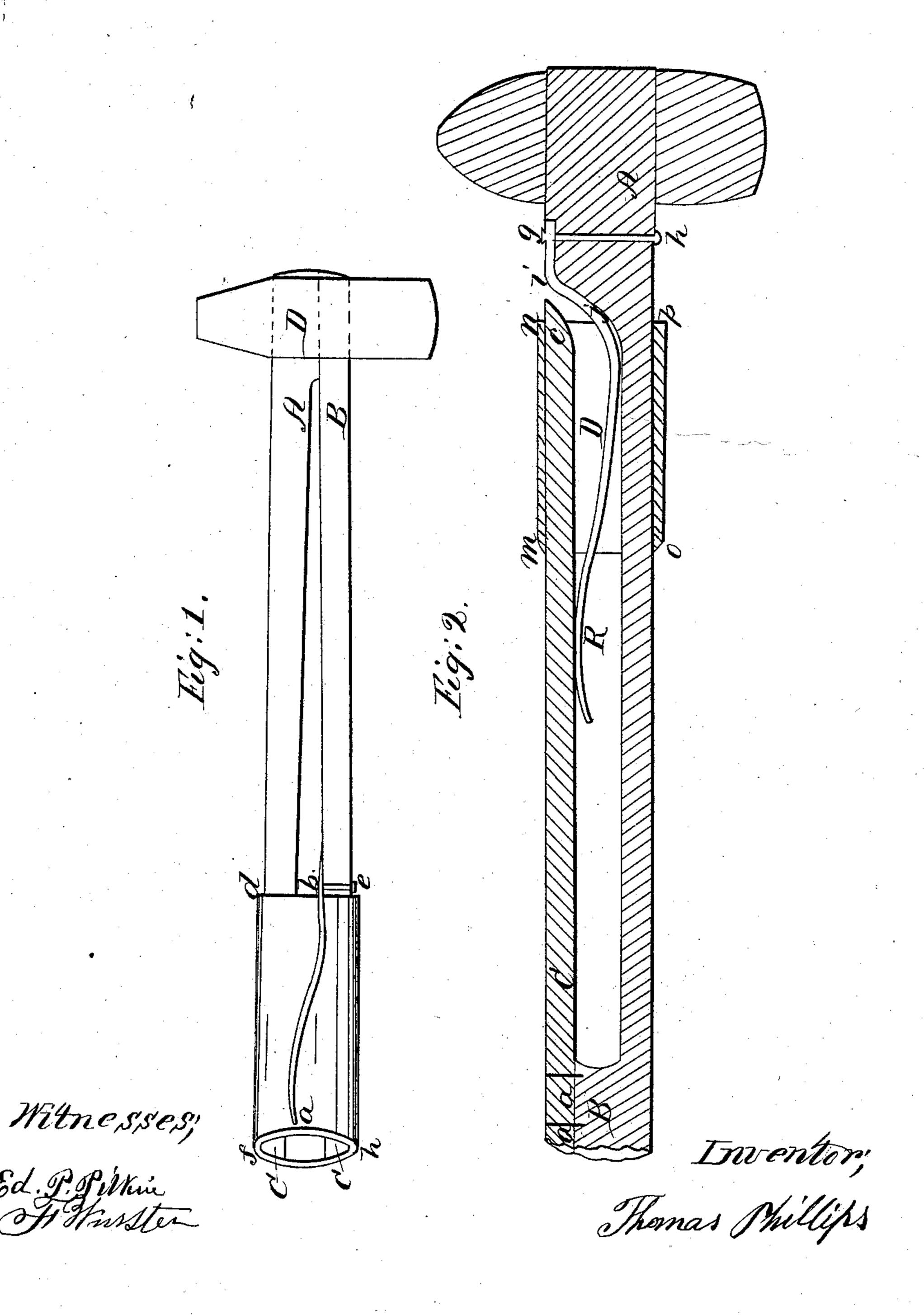
T. Phillips,

Tool Handle.

Patented Apr. 9,1861.

J7-931,997.



## UNITED STATES PATENT OFFICE.

THOMAS PHILLIPS, OF ANN ARBOR, MICHIGAN.

HANDLE FOR HAMMERS, &c.

Specification of Letters Patent No. 31,997, dated April 9, 1861.

To all whom it may concern:

Be it known that I, Thomas Phillips, of the city of Ann Arbor, in the county of Washtenaw and State of Michigan, have invented a new and Improved Hammer-Handle for All Kinds of Hammers and Sledges; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings and to the letters of reference marked thereon.

The nature of my invention consists, in making the handle in two parts and fastening a spring between, in order to prevent the jar usually given to the hand and arm when striking a heavy blow.

To enable others skilled in the art to make and use my invention I will proceed to describe its construction and operation

scribe its construction and operation. For hand hammers, I take a piece of hickory or any other suitable wood, of the required shape and size, and slit it longitudinally, through the center. I then fasten at the required distance from the end, and upon 25 the inside of the lower half of the handle, a steel spring of the required strength, leaving the other end lying loose against the inside of the other half of the handle directly beneath where seized by the hand, the spring 30 being bent in such a form as to spread the two halves of the handle any required distance apart. Or in place of the above described spring I fasten a spiral spring in the same manner but directly beneath the hand. 35 Then having inserted the handle in the hammer, I draw a cover of india rubber or any other sufficiently pliable substance over the end of the handle where seized by the hand

and fasten it firmly to prevent slipping.

For sledges, I take a sledge handle and slit it from the end, a little on one side of

the center, cutting to the surface just before reaching the point of insertion into the sledge. I then cut out of the largest half of the handle, from the inside as shown in Figure 2, a space sufficient to allow the insertion of the spring either of steel or a spiral. Then fastening the two parts of the handle together firmly where seized by the right hand, and over the spring, where seized by 50 the left hand, fastening a cover of india rubber in the same manner as in hand hammers.

In the accompanying diagram, Fig. 1 represents a hand hammer. A, B, are the two halves of the handle. C C, are the two ends of the halves as held apart by the spring a, b. E is the bolt holding the spring in place. f, h, d the band of india rubber surrounding the whole.

Fig. 2 represents the sledge. A, B, the 60 largest half of the handle, C C the smaller and upper half, a a the two screws holding both parts together, k, j, i, the spring, g, h, the bolt fastening the spring to the handle and m, n, o, p the band of india rubber sur- 65 rounding the whole.

What I claim as my invention and desire to secure by Letters Patent, is—

The dividing the handle into two parts and applying a spring either lever or spiral 70 in such a manner as to spread the two parts of the handle apart, allowing them to spring together and vice versa, when a blow is struck, and the surrounding the whole with some pliable or springy substance, as india 75 rubber, the whole being arranged as described for the purpose specified.

## THOMAS PHILLIPS.

Witnesses:

F. Wurster, Ed. P. Pitkin.