(No Model.)

L. M. NUTTING.

BUSH HAMMER.

No. 412,532. Patented Oct. 8, 1889.

FIG. 1.

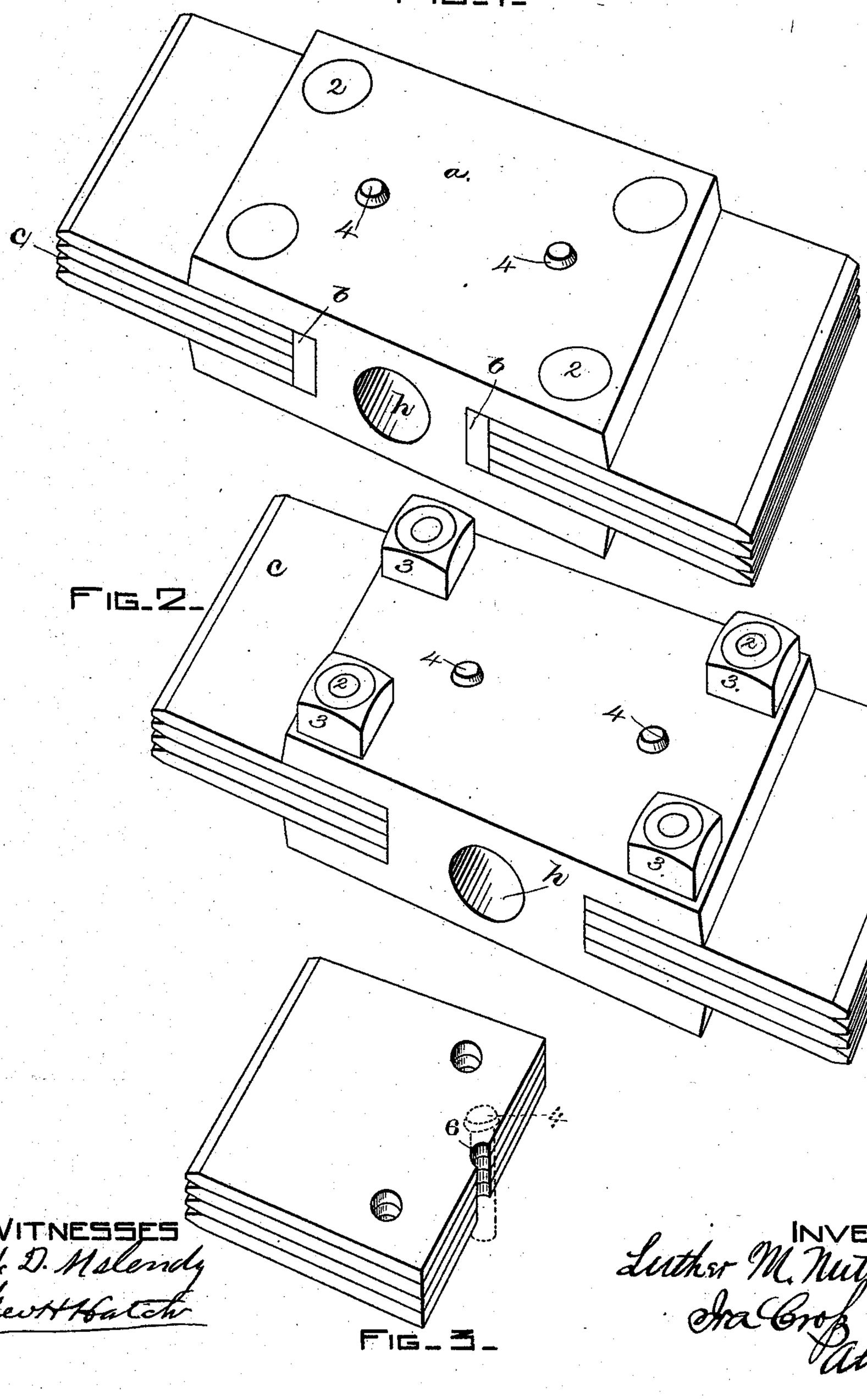

FIG. 2.

FIG. 3.

WITNESSES
H. D. Mslendy
Lewis Hatch

INVENTOR
Luther M. Nutting
Ira Cross
Atty

UNITED STATES PATENT OFFICE.

LUTHER M. NUTTING, OF CONCORD, NEW HAMPSHIRE, ASSIGNOR OF ONE-HALF TO HENRY W. HAYDEN, OF SAME PLACE.

BUSH-HAMMER.

SPECIFICATION forming part of Letters Patent No. 412,532, dated October 8, 1889.

Application filed March 12, 1885. Serial No. 158,512. (No model.)

To all whom it may concern:

Be it known that I, LUTHER M. NUTTING, of Concord, in the county of Merrimac and State of New Hampshire, have invented a new and useful Improvement in Bush-Hammers, of which the following, taken in connection with the accompanying drawings, is a specification.

This invention has for its object to provide a bush-hammer with suitable means for preventing lateral displacement of the cutters, to reduce the strain upon the usual fastenings which hold the cutters in position, and to prevent the hammer head or pole from becoming worn or injured by repeated blows.

The invention consists in the combination, with the head having a cutter-receiving slot at one or both ends, cutters placed in the slots, and bolts or rivets passing through the head and cutters for holding the latter firmly in position, and a hardened-steel seat or gib placed in the cutter-receiving slot and extending in the direction of its length against which the cutter or cutters bear, of a key passing through the head, which for a portion of its length is interposed between the base or lower end of the cutters and the hardened-steel gib.

Figure 1 shows in perspective a bush-hammer embodying this invention. Fig. 2 is a perspective view of the bush-hammer, the hardened seat or gib being removed. Fig. 3 shows a series of cutters removed from the hammer-head.

The hammer-head *a* is herein shown as provided at each end with a slot adapted to receive a series of cutters *c*, preferably of somewhat greater width than the width of the hammer-head. Two bolts or rivets 2 2 pass through the hammer-head *a* near each end, and also through the cutters placed in the slots, said bolts being provided with nuts 3 for tightening them. A hardened-steel gib *b*, of suitable shape to tightly fit the receiving-slot, is placed therein and extends in the direction of the length of said slot. The inner ends of the cutters bear directly against the said gib *b*, in contradistinction to bearing against the hammer-head *a*. The gib extending horizontally with relation to the hammer-head is provided with a slot or groove which registers with a slot or groove 6, cut in the base of the cutters to receive a key 4, which passes through the hammer-head *a* at the point of junction of the base of the cutters and the gib, so that said key for a part of its length enters both the slot or groove cut in the gib and the slot or groove 6, (see Fig. 3,) cut in the base of the cutters. The key 4 thus described and located prevents any lateral displacement of the cutters, and also greatly reduces the strain upon the bolts or rivets 2 2, as well as prevents displacement of the gib *b*.

By providing the hammer-head with a hardened-steel gib, as described, the cutters at all times bearing against the said gib do not injure it, so that if it becomes necessary to substitute a new cutter it may be readily done without the necessity of expending time and labor to fit it.

The hammer-head *a* is provided with a suitable hole or aperture *h* to receive the handle. It is obvious that the hammer-head *a* may be provided with a cutter-receiving slot at only one end.

I claim—

In a bush-hammer, the head *a*, having a cutter-receiving slot at one or both ends, cutters having a groove 5 in their bases placed in the slots, and bolts 2, passed through the said head and cutters for holding the cutters in position, combined with the hardened-steel gib *b*, placed in the cutter-receiving slot in the direction of its length, against which the bases of the cutters bear, and provided with a groove to register with the groove 6, and the key 4, interposed between the gib *b* and the cutters in the said registering grooves to prevent lateral displacement of the gib and cutters, substantially as described.

In testimony whereof I have signed my name to this specification, in the presence of two subscribing witnesses, on this 6th day of March, A. D. 1885.

LUTHER M. NUTTING.

Witnesses:

CHARLES R. CORNING,

SAMUEL C. EASTMAN.