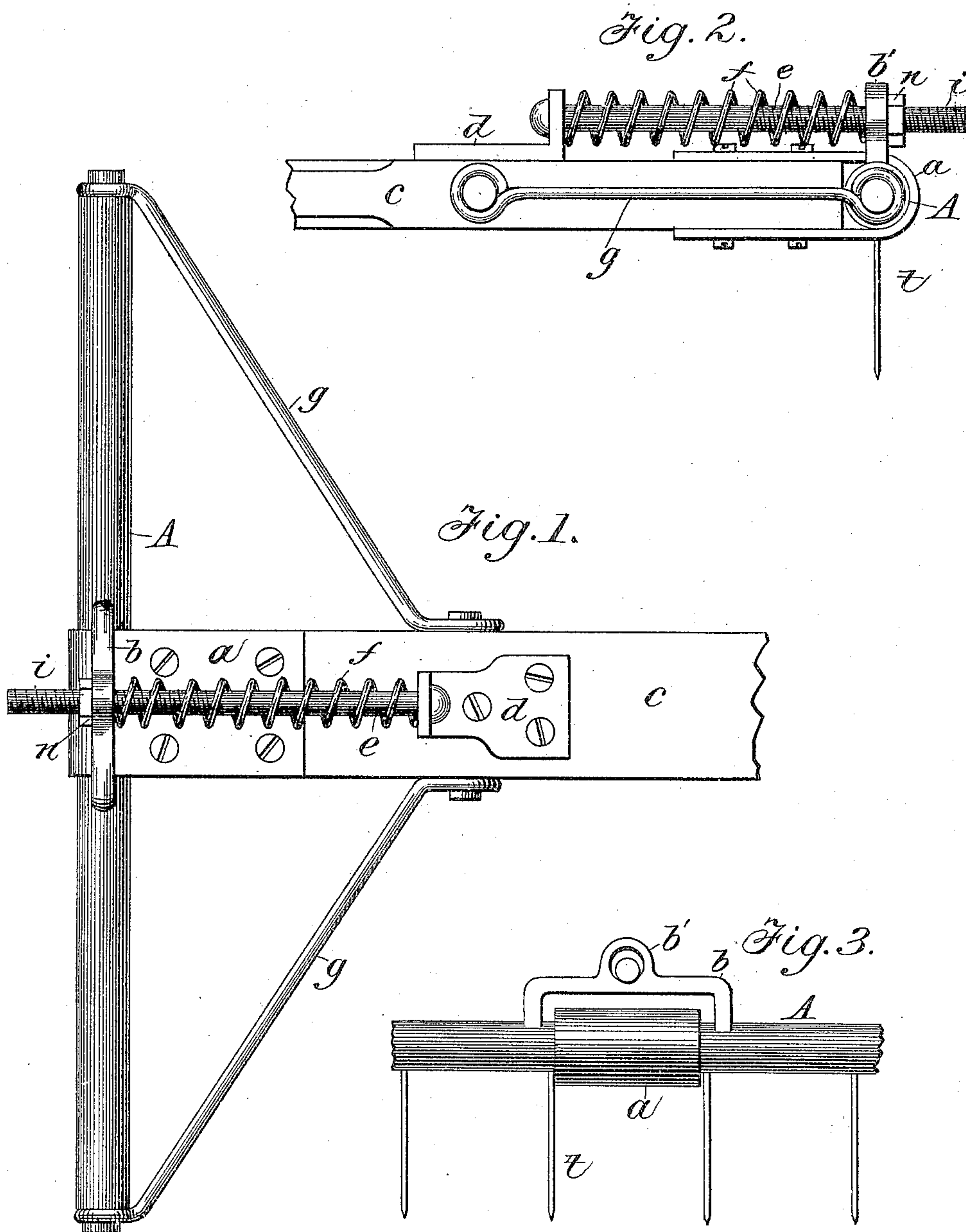


(No Model.)

S. SWOPE.
RAKE.

No. 446,482.

Patented Feb. 17, 1891.



Witnesses:
Joseph Mullikin,
Geo. M. Davis.

Inventor.
Sheldon Swope.
per
Sydney B. Davis,
Attorney in Fact.

UNITED STATES PATENT OFFICE.

SHELDON SWOPE, OF TERRE HAUTE, INDIANA.

RAKE.

SPECIFICATION forming part of Letters Patent No. 446,482, dated February 17, 1891.

Application filed October 3, 1890. Serial No. 367,031. (No model.)

To all whom it may concern:

Be it known that I, SHELDON SWOPE, a citizen of the United States, residing at Terre Haute, in the county of Vigo and State of Indiana, have invented certain new and useful Improvements in Rakes; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form part of this specification.

My invention relates to improvements in rakes; and the object of my invention is to provide an automatic contrivance whereby the breaking of teeth may be prevented. I attain this object by the mechanism illustrated in the accompanying drawings, in which—

Figure 1 is a top view of the rake as it appears when ready for service. Fig. 2 is a side elevation of the rake. Fig. 3 is an end view of a portion of the rake, showing the staple or bridge and the guide-ring.

Similar letters refer to similar parts throughout the several views.

The letter A indicates a cylindrical rake-head of wood or other suitable material, into which the wooden or metallic teeth *t t* are set and fastened in any convenient manner.

The letter *a* indicates a metallic strap or loop, which is fastened, first, upon the top of a handle or pole *c*, then looped closely around the cylindrical rake-head A, and then fastened to the lower side of the handle or pole *c*, thus fixing the rake-head firmly to the end of the handle, and at the same time leaving it free to revolve in the loop formed by the strap *a*. Two metallic rods *g g*, one end of each being looped around the respective ends of the rake-head and fastened at their other ends to the handle or pole *c*, form strong braces or guards.

The letter *b* indicates a metallic staple or bridge, which spans the loop *a* and is driven or fastened into the rake-head A diametrically opposite to and standing in the same plane with the teeth *t t*. Upon the top and at the middle of the bridge *b* there is a guide ring or loop *b'*, which acts as a guide for the rod *e*. Said rod *e* is a metallic rod, which is supported at one end by an angle-plate *d*, said angle-plate being mounted upon the handle or pole *c*. A thread is cut upon the other end of said rod *e* and carries a set-nut *n*. A

strong spiral spring *f* is placed around the rod *e* and finds bearings against the faces of the angle-plate *d* and the guide-ring *b'*. The spring *f* is regulated by a set-nut *n*, which may be screwed back and forth upon the end of the rod *e* and upon the opposite side of the guide-ring *b'* from the face against which the spring *f* bears.

My invention operates as follows: I adjust the spring *f* and bridge *b* by means of the set-nut *n* upon the rod *e*, so that the teeth upon the rake-head A will be held perpendicular to the handle or pole *c*. The spring *f* is made of such strength that it will resist the moderate strain brought upon the teeth by the weight of the substance being raked; but if the teeth be caught by any immovable obstruction, such as earth, roots, rocks, &c., the spring will immediately give way and allow the rake-head A to revolve in its bearings until the teeth stand out behind and parallel with the handle or pole *c*. Thus the rake is safely drawn over the obstruction. When once safely over the obstruction, the spring *f* immediately presses the staple *b* to an upright position, thus setting the teeth in position for work again.

My invention may be used simply as a hand-rake, or may be used as an attachment upon horse-rakes and other similar contrivances.

I am aware that prior to my invention rakes have been made the teeth of which were fixed perpendicular to the handle or pole and with spring mechanism for raising and lowering the teeth. I therefore do not claim such combination broadly; but

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

In a rake, the combination of the rake-head A, furnished with teeth *t t*, the metal strap or loop *a*, the bridge or staple *b*, with the guide-ring *b'*, the rod *e*, having the thread *i* cut upon one end and bearing there the set-nut *n*, said rod being supported by the angle-plate *d*, the spring *f*, the braces *g g*, and the handle or pole *c*, all substantially as described, and for the purpose set forth.

In testimony that I claim the foregoing as my own I affix my signature in presence of two witnesses.

SHELDON SWOPE.

Witnesses:

EDWARD MANLOVE,
CHAS. T. NEHF.