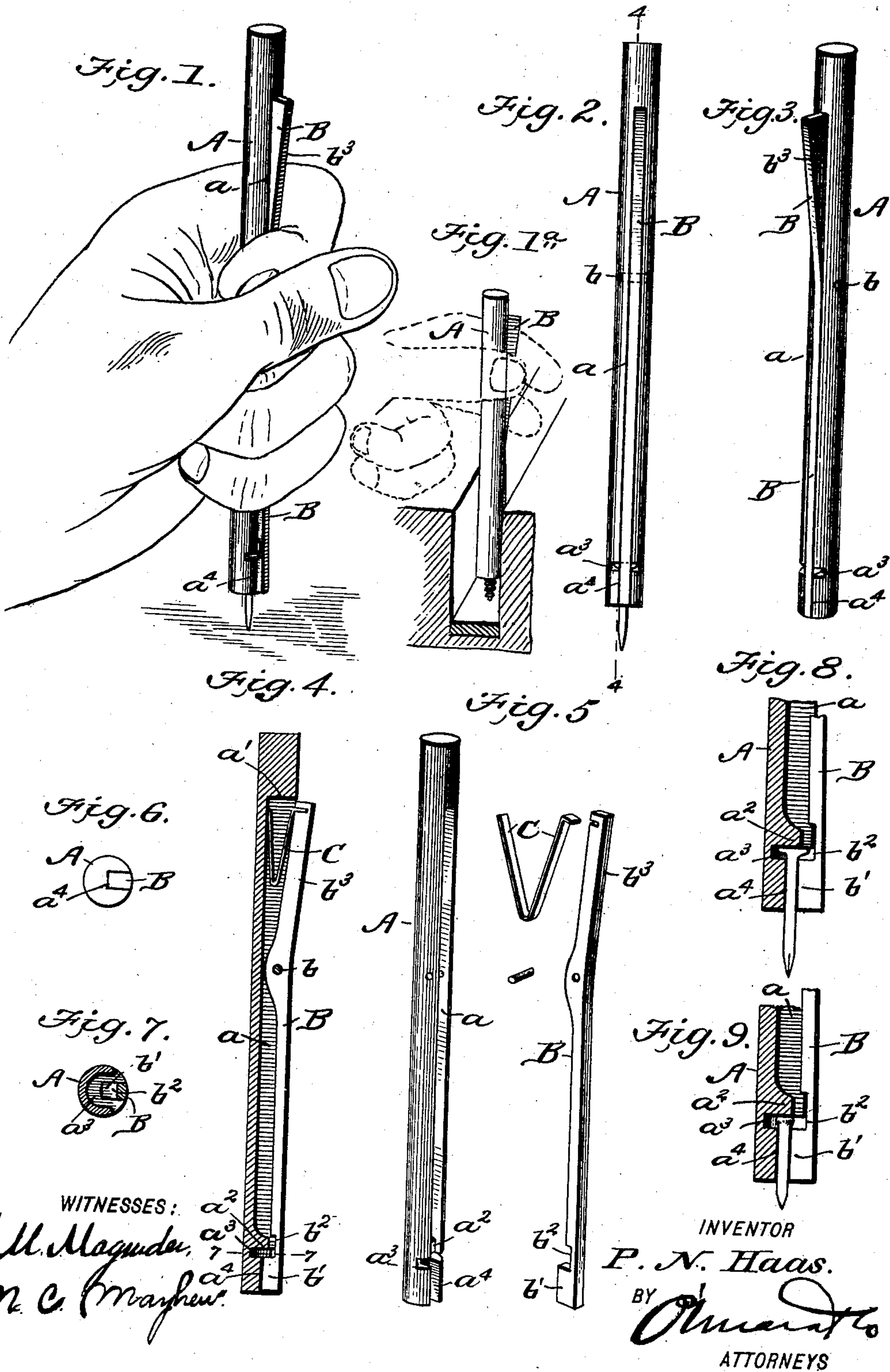


No. 682,681.

Patented Sept. 17, 1901.

P. N. HAAS.  
NAIL OR SCREW SET.  
(Application filed Mar. 2, 1901.)

(No Model.)





# UNITED STATES PATENT OFFICE.

PHAON N. HAAS, OF ALLENTOWN, PENNSYLVANIA.

## NAIL OR SCREW SET.

SPECIFICATION forming part of Letters Patent No. 682,681, dated September 17, 1901.

Application filed March 2, 1901. Serial No. 49,636. (No model.)

*To all whom it may concern:*

Be it known that I, PHAON N. HAAS, a citizen of the United States, residing at Allentown, in the county of Lehigh and State of Pennsylvania, have invented a new and useful Nail or Screw Set, of which the following is a specification.

My invention is an improved nail-set designed principally for use by carpenters for holding and starting a nail in position, and is especially designed for holding small nails, as will be particularly described hereinafter.

The object of my invention is to provide a simple inexpensive tool to firmly hold a nail in a position in which it is to be driven and without releasing this hold the nail may be started into the wood by striking the outer end of the holder, after which the tool is removed and the nail driven "home."

My invention also has for its object to provide a tool to protect the fingers of a mechanic when in the act of starting a nail and especially a small one, as they are very hard to hold when starting and often result in mashing or cutting the fingers when thus engaged.

With these objects in view my invention will be hereinafter described in detail, and specifically pointed out in the appended claims, reference being had to the accompanying drawings, in which—

Figure 1 is a perspective view of my invention in use; and Fig. 1<sup>a</sup> is a similar view, hereinafter referred to. Fig. 2 is a front view of the same. Fig. 3 is a perspective view of the tool, showing the spring-jaw closed. Fig. 4 is a longitudinal section of the tool, taken on the line 4 4 of Fig. 2. Fig. 5 shows the several parts detached. Fig. 6 is a plan view of the gripping end of the tool. Fig. 7 is a cross-section on the line 7 7 of Fig. 4; and Figs. 8 and 9 are detail sections of the lower end of the tool, showing the same holding nails of different design and of different-sized heads.

In the drawings the main or body portion A of my holder is preferably made of cylindrical form and of such length that it may be easily held in the hand.

Running lengthwise and nearly the entire distance of the body portion A is a recess or groove *a*, which terminates at its upper end at *a'* and at its lower or holding end in a short

shoulder *a*<sup>2</sup>. The lower side of this shoulder forms a seat, against which the nail-head rests when the latter is in position. To provide means for holding a nail having a large or flat head, I provide under the shoulder *a*<sup>2</sup> a recess *a*<sup>3</sup> circular in form and of somewhat larger diameter than the groove *a*. A groove *a*<sup>4</sup> of the same dimension as the groove *a* communicates at its upper end with the recess *a*<sup>3</sup> and runs to the lower end of the body, as will be clearly understood from the drawings. Into this groove *a*<sup>4</sup> the nail is inserted, and to provide means for positively holding it I arrange a flat spring-operated arm B, pivoted at *b* and having its lower end provided with an extension *b'* to engage the nail. Directly above the extension *b'* the arm B is cut out, as at *b*<sup>2</sup>, which cut-out portion straddles the shoulder *a*<sup>2</sup> and allows the lower end of the arm to embed itself in the groove, thus leaving the lower end of the tool perfectly smooth and at the same time adapting itself to nails of different size.

Connected to the arm B at its upper end is a flat V-shaped spring C, whose purpose is to throw the lower end of the arm into the groove against a nail when one is in position in the holder, thereby providing a positive retention of the nail. About at the pivotal point the arm is deflected outwardly to provide a handle portion *b*<sup>3</sup>, by which the arm is operated to grip or release the hold upon the nail, as the case may be.

The advantages and operation of my invention will be readily apparent to those skilled in the art to which it appertains. The construction is of an exceedingly simple nature and therefore very cheap to manufacture. By making the holder of the design illustrated the same may be easily carried in the vest-pocket, trousers, or apron of the workman without any inconvenience.

My invention will be found useful in holding a nail or screw in places that are of such size that will not permit of the insertion of the hand while the nail or screw is being started—as, for instance, as illustrated in Fig. 1<sup>a</sup> of the drawings.

Having thus fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. In a nail-set, the combination of a body

portion, a groove formed in said body portion, a shoulder formed at the lower end of the said groove, a recess formed under said shoulder, a seat or groove for holding a nail, 5 and means for positively retaining the nail in position, substantially as described.

2. In a nail-set, the combination of a body portion having a groove formed therein, a shoulder formed at the lower end of said 10 groove, a recess formed under said shoulder,

a groove or seat communicating with the said recess, a spring-actuated arm held in the said groove of the body portion, and having its lower end provided with an extension adapted to enter the seat, substantially as described. 15

PHAON N. HAAS.

Witnesses:

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