

(No Model.)

J. M. MATTHEWS & A. E. FRANCIS.
PICK.

No. 461,083.

Patented Oct. 13, 1891.

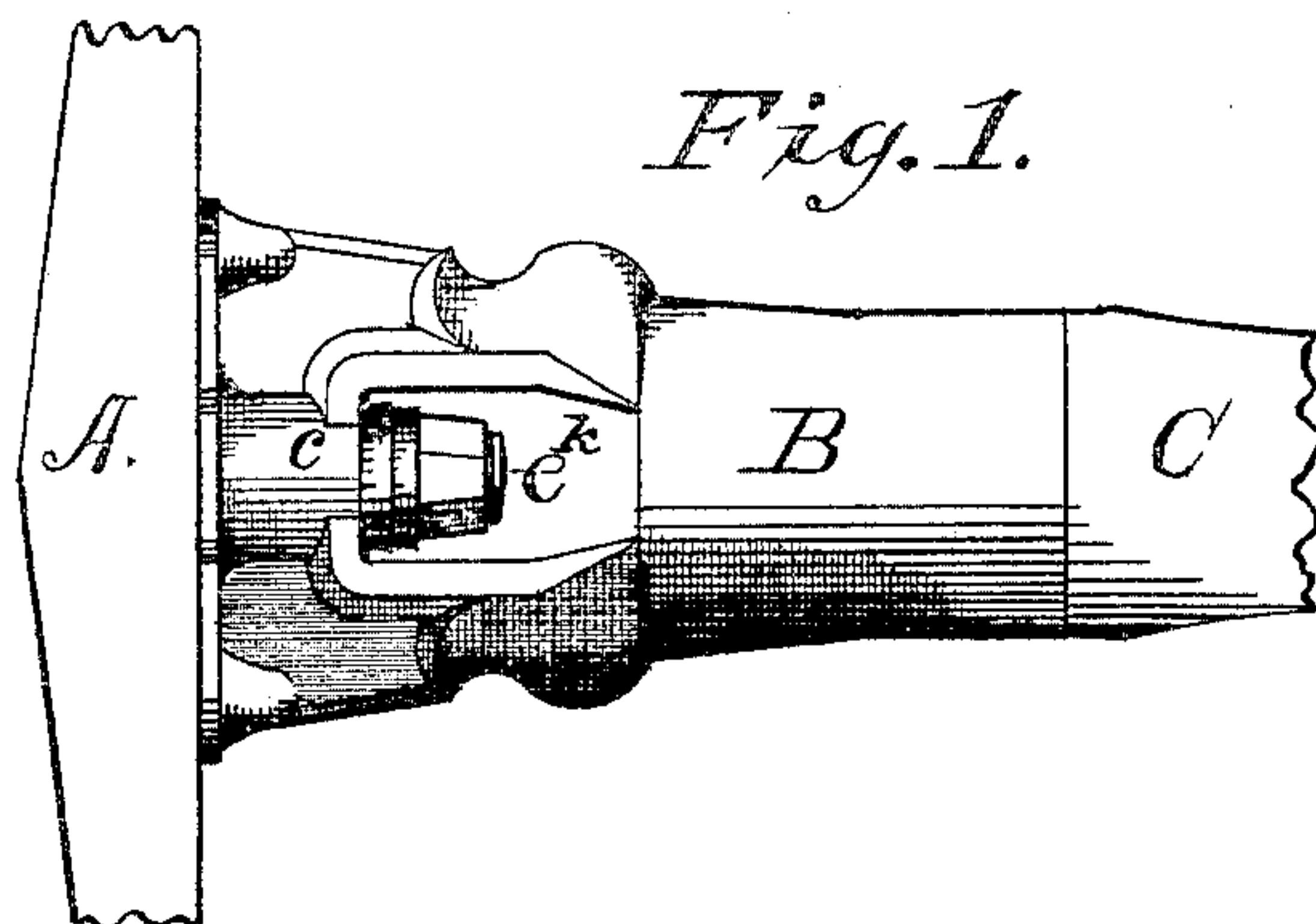
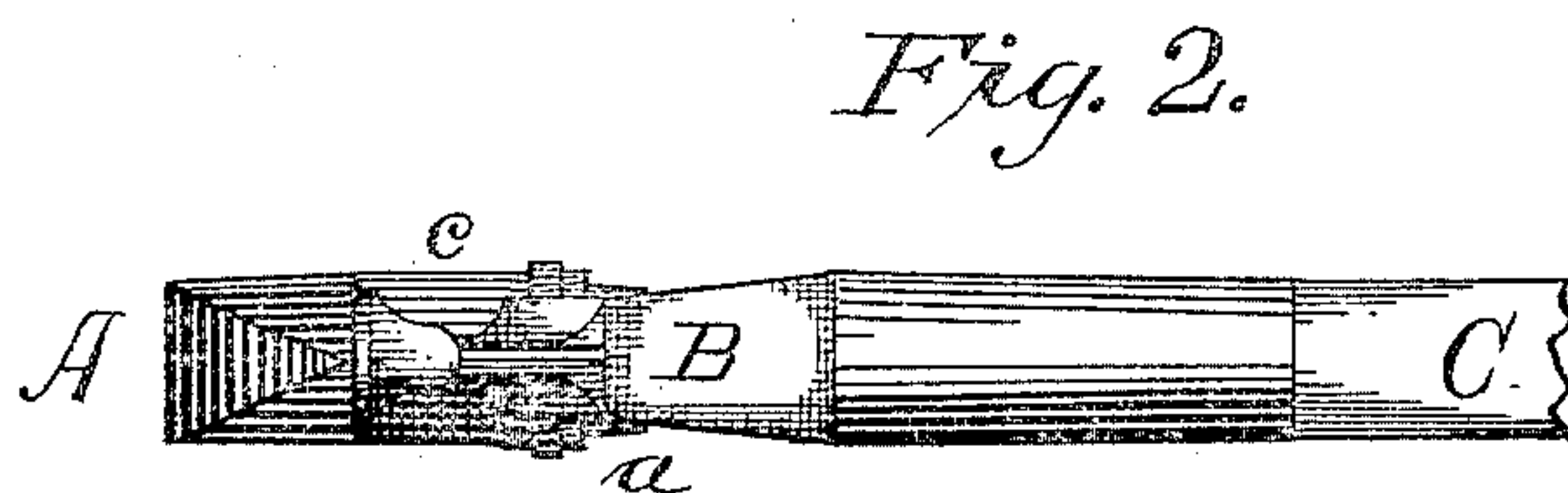
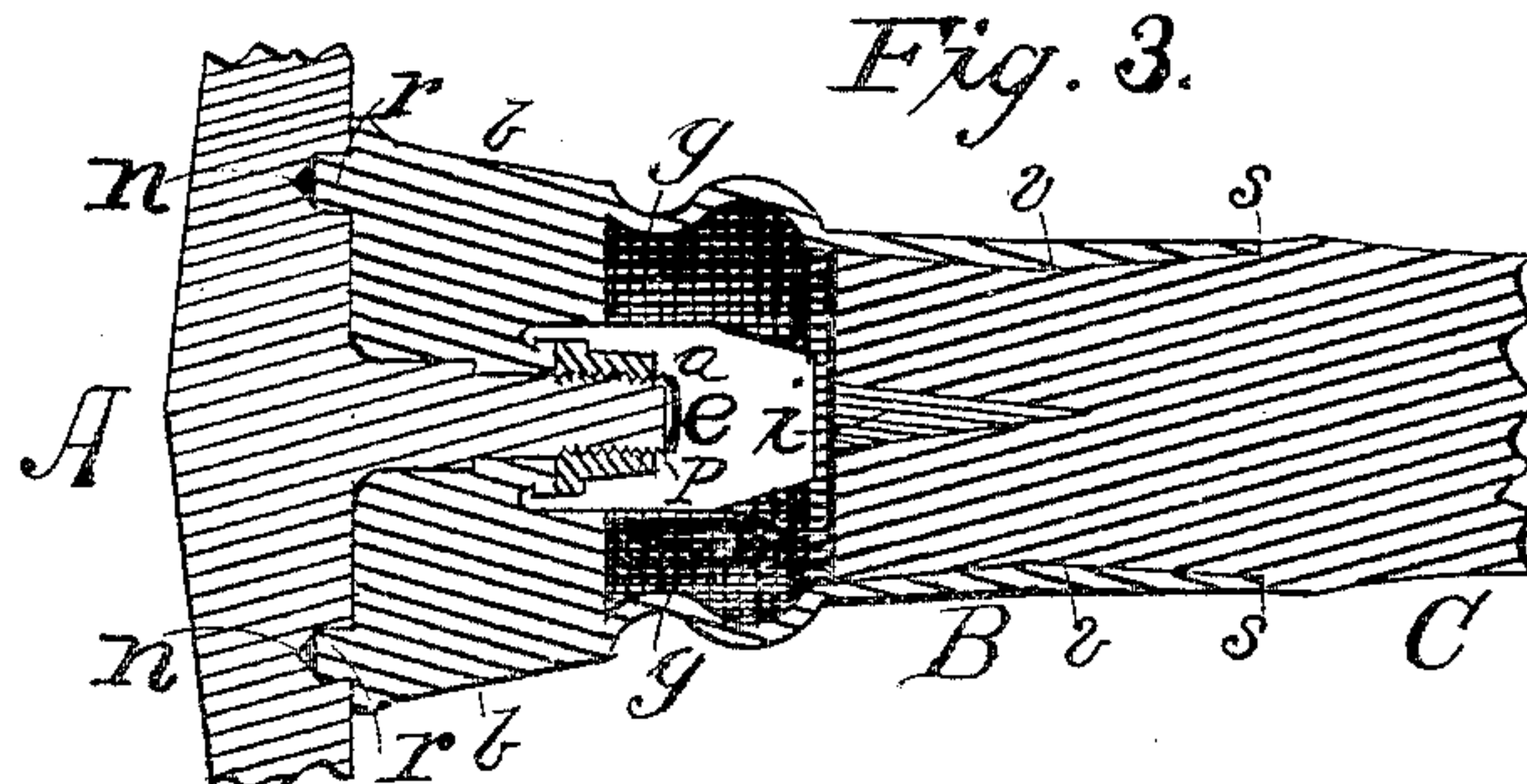
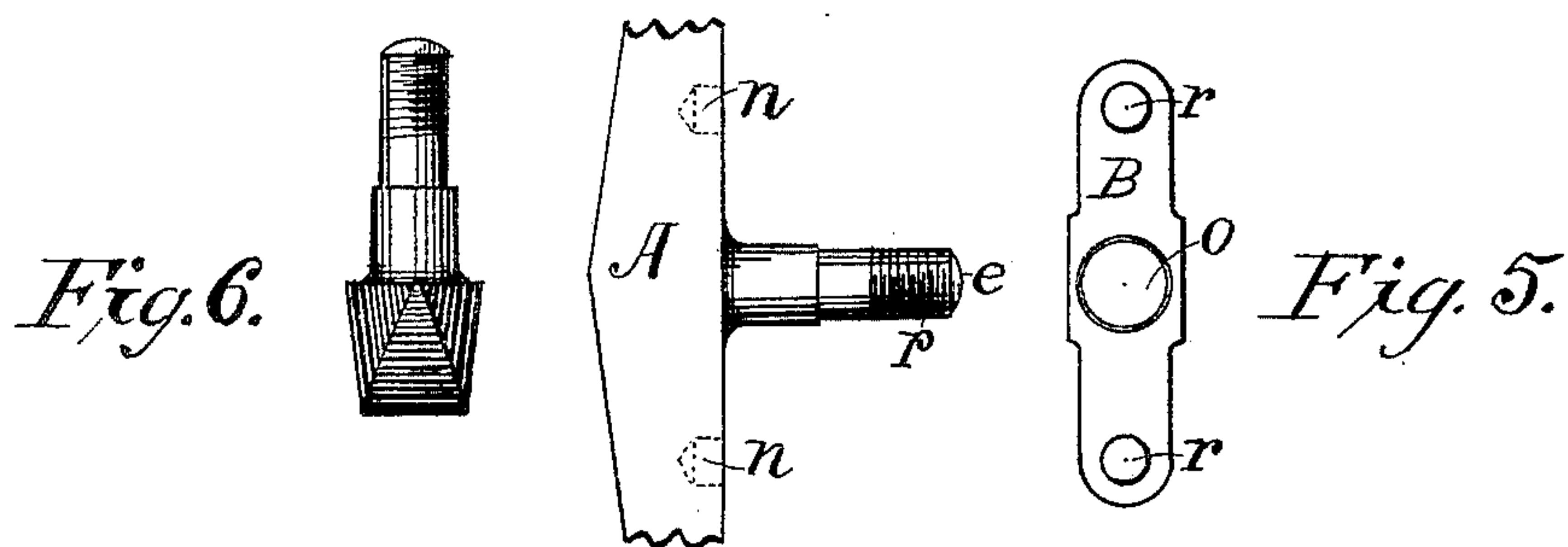


Fig. 4.



Witnesses.
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UNITED STATES PATENT OFFICE.

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PICK.

SPECIFICATION forming part of Letters Patent No. 461,083, dated October 13, 1891.

Application filed November 17, 1890. Serial No. 371,716. (No model.)

To all whom it may concern:

Be it known that we, JAMES MADISON MATTHEWS, of Asheville, in county of Buncombe and State of North Carolina, and ALLAN E. FRANCIS, of Cleveland, in the county of Cuyahoga and State of Ohio, both citizens of the United States, have invented a new and useful Pick, of which the following is a specification.

Our invention relates to improvements in picks such as are used for loosening and breaking up coal and ores and as a useful tool elsewhere in loosening clay, earth, and stone; and the objects of our improvements are, first, to provide a separable head and handle; second, to provide a socket for the handle, to which picks of different weights can be successively secured or removed and in which the handle, when loose, can be tightened by driving forward and rewedging and in which the handle can be wedged independent of the fastening device for the pick-head, (in other inventions of the kind the wood of the handle has been seriously cut and provision for tightening the handle when loosened by shrinkage very imperfect,) and, third, to provide a pick-head so constructed as to make this possible by use of a nut. These objects we obtain by the device illustrated in the accompanying drawings, in which—

Figure 1 is a side elevation of the pick with head vertical, a portion of the handle and points being removed to allow larger scale. Fig. 2 is a side elevation with head in horizontal position. Fig. 3 is a sectional view of Fig. 1 on median line cutting it in equal parts. Fig. 4 is a side elevation of central portion of pick-head, showing shank. Fig. 5 is a diagram of the end of socket which is fitted to the pick-head. Fig. 6 is an end elevation of pick-head, showing shank.

A shows our pick-head with points severed, *e* being a shank centrally located on side next to socket, it being provided at the end with a thread *p* for fastening-nut *a*. On each side of shank *e* is a recess *N*.

B shows our socket, cast of strong metal

and cored for the reception of handle C, the core being so formed as to make the opening at end of socket constricted laterally in its central part, as shown at V V, so that the end of handle C, when made tapering and driven in until compressed firmly at S S and then wedged at *i*, is strongly held by the constricted portion of socket at V V. The core extends farther, forming the two chambers *g g* for the purpose of admitting the end of handle C when driven in the process of tightening, the superfluous wood being afterward cut away to allow removal of nut *a*. In the central portion of socket B is an aperture *k* for convenience in manipulating nut *a*. The end of socket B which comes in contact with pick-head A has a sub-socket *o* in sleeve *c* for reception of shank *e*, and the socket is widened laterally by flanges *b b*, acting as braces, each being provided with a lug *r* to fit in recess N to prevent the handle from turning on shank *e*.

The handle C being wedged in socket B, as above described, by wedge *i*, pick-head A is adjusted by introducing shank *e* into sub-socket *o*. When in position, lugs *r r* engage in recesses N N, and tightening of nut *a* secures head A to socket B, this being done by a wrench provided for the purpose.

What we claim as our invention, and desire to secure by Letters Patent, is—

In picks, the combination of head A, having recesses N N, shank *e*, and nut *a*, with handle-socket B, having expanding sides *b b*, provided with lugs *r r* and aperture *k* to afford access to nut *a*, substantially as shown and described.

JAMES MADISON MATTHEWS.

ALLAN E. FRANCIS.

Witnesses as to signature of James Madison Matthews:

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