

(No Model.)

A. E. FRANCIS.
PICK.

No. 454,543.

Patented June 23, 1891.

Fig. 3.

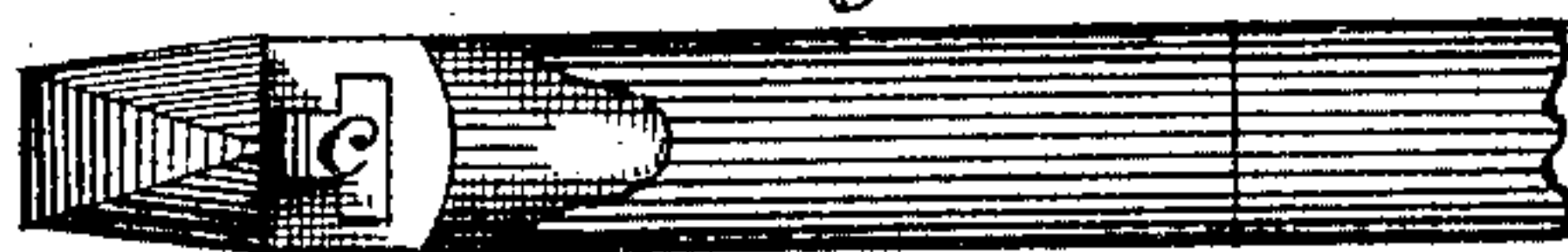


Fig. 2

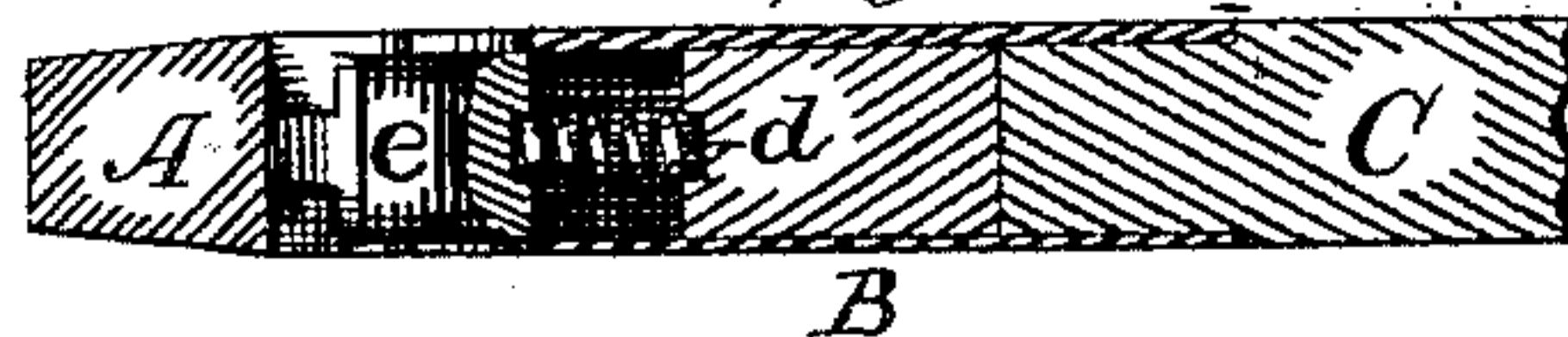


Fig. 4.

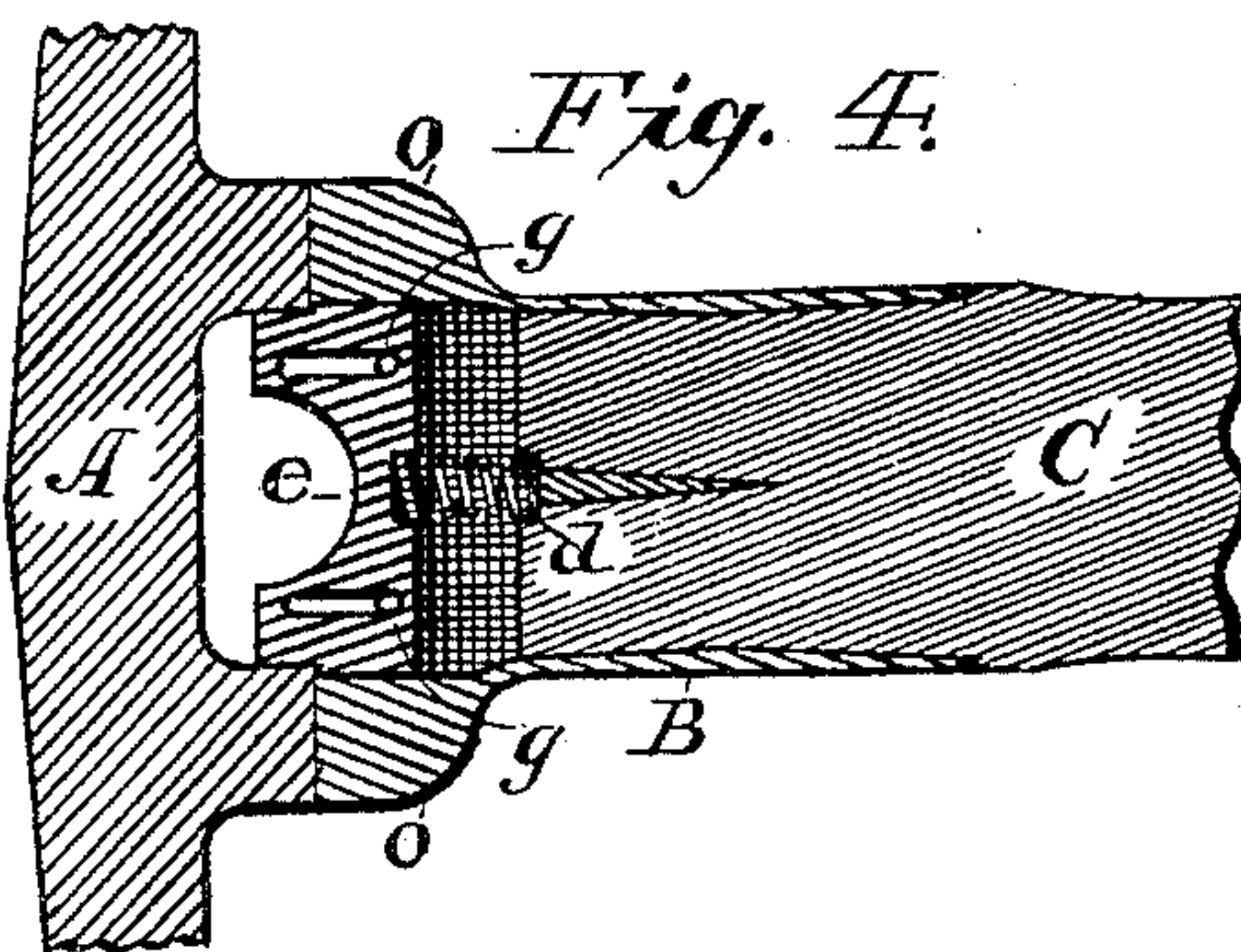


Fig. 1.

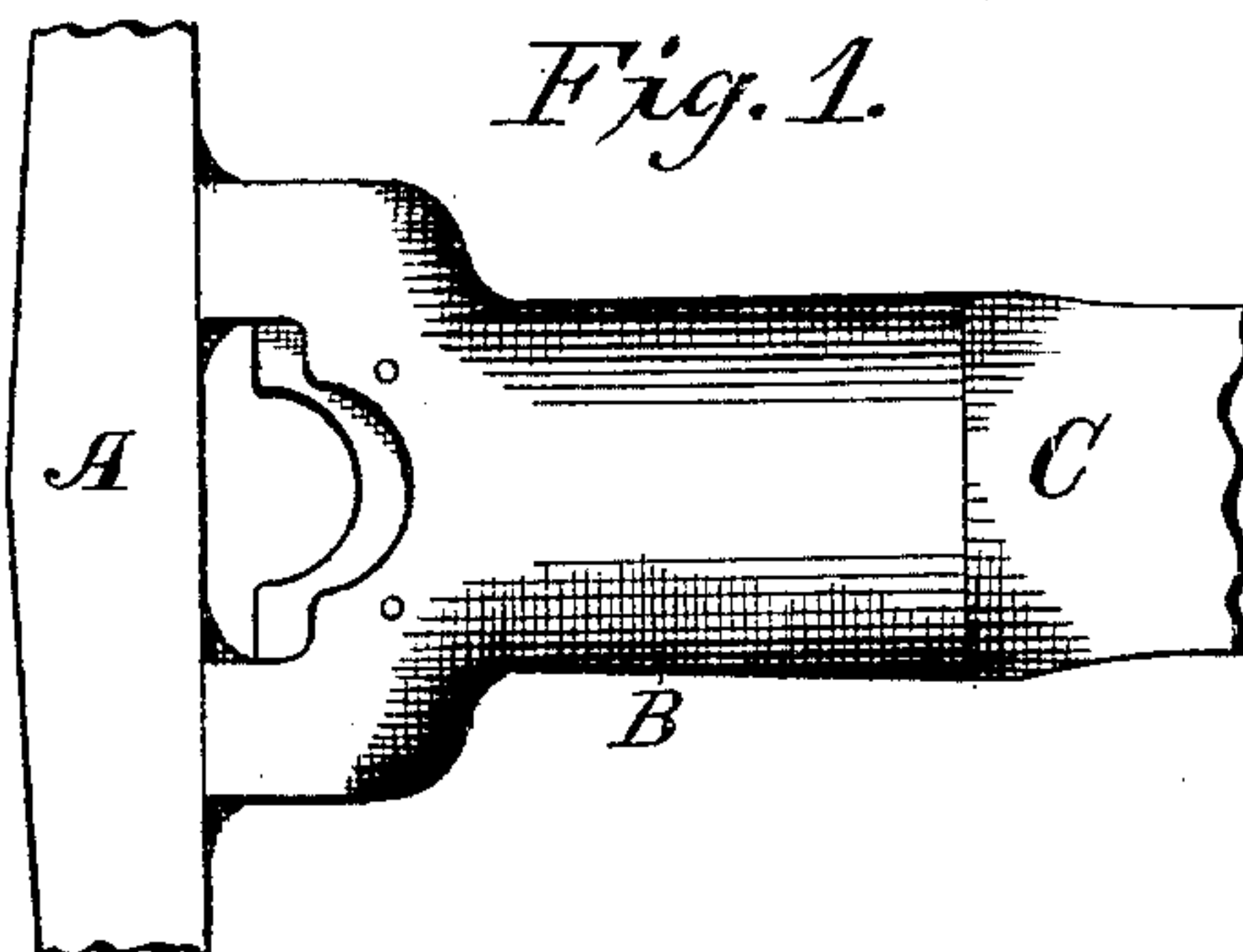


Fig. 5.



Fig. 6.



Witnesses.

W. H. Francis
Jenny L. Francis

Inventor.
Alfred E. Francis

UNITED STATES PATENT OFFICE.

ALLAN E. FRANCIS, OF CLEVELAND, OHIO.

PICK.

SPECIFICATION forming part of Letters Patent No. 454,543, dated June 23, 1891.

Application filed October 27, 1890. Serial No. 369,536. (No model.)

To all whom it may concern:

Be it known that I, ALLAN E. FRANCIS, a citizen of the United States, residing at Cleveland, in county of Cuyahoga and State of Ohio, have invented a new and useful Pick, of which the following is a specification.

My invention relates to picks, such as are used in mines for loosening and breaking up coal and ores, and as a useful tool elsewhere in loosening clay, earth, and stone; and the objects of my 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, third, to provide a pick-head so constructed as to make this possible, without any removable parts, such as screws, nuts, bolts, or wedges, to be lost when changing in dark places, such as mines, and without the use of tools, such as screw-drivers or wrenches, with which to effect the change. These objects I obtain by the device illustrated in the accompanying drawings, in which—

Figure 1 is a side view of the pick with head vertical, a portion of the handle and points being removed to allow larger scale. Fig. 2 is a section of Fig. 3 on a central line, showing one-half. Fig. 3 is a side elevation of the pick with head in a horizontal position. Fig. 4 is a section of Fig. 1 on a line dividing it in halves at right angles to Fig. 2. Fig. 5 is a plan view of a portion of the pick-head, showing the tongues. Fig. 6 is a plan of the lower end of socket, showing the grooves *p p* into which the tongues *c c* of the head are fitted.

A shows a portion of the pick-head from which the points are severed, leaving its central portion, showing two lugs or tongues *c c*.

B is a metal socket, cast preferably of aluminum bronze, into which the end of wooden handle C is wedged.

The lugs or head A are T-shaped tongues, as shown by *c* in Fig. 3. Socket B has two projections *o o*, cored and grooved into a counterpart of the tongues *c*, as shown by *p*, in Fig. 6, and is provided with a block *e*, consisting of a block in which *g g* are pins acting as stops to prevent the same from being thrown out when actuated by spring *d*, and after the head is removed.

To secure head to handle, the index-finger is used on block *e* against spring *d* and the tongues *c c* are entered in grooves *p p* and slid into place. When block *e* is released, it engages with lugs *c c* and prevents any movement of the head on the handle.

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

A pick consisting of a head provided with tongues *c*, longitudinally arranged thereon, in combination with handle-socket B, provided with grooves *p*, corresponding in shape to the tongues *c*, the locking-block *e*, and spring *d*, substantially as described.

ALLAN E. FRANCIS.

Witnesses:

MARY M. BORDEN,
M. M. FRANCIS.