2 Sheets—Sheet 1.

H. R. SMITH & N. K. WADE.

CORE-STRIKER.

No. 176,760. Patented May 2, 1876.

Fig 1.

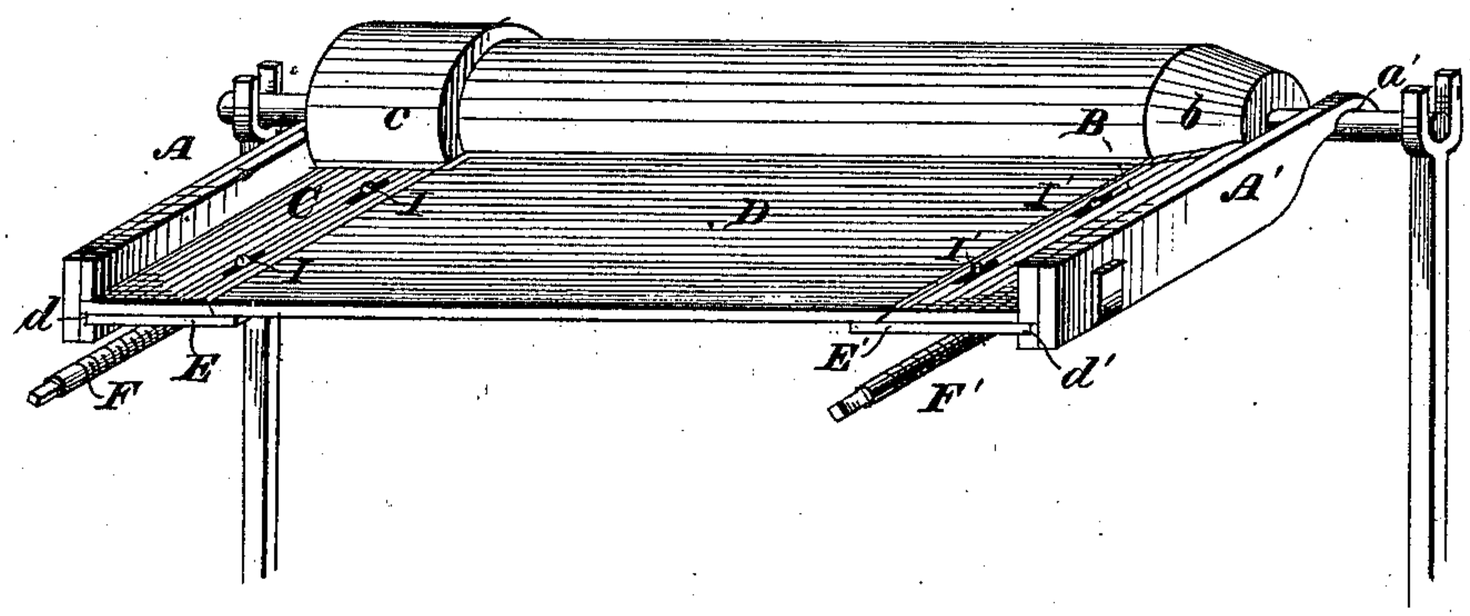
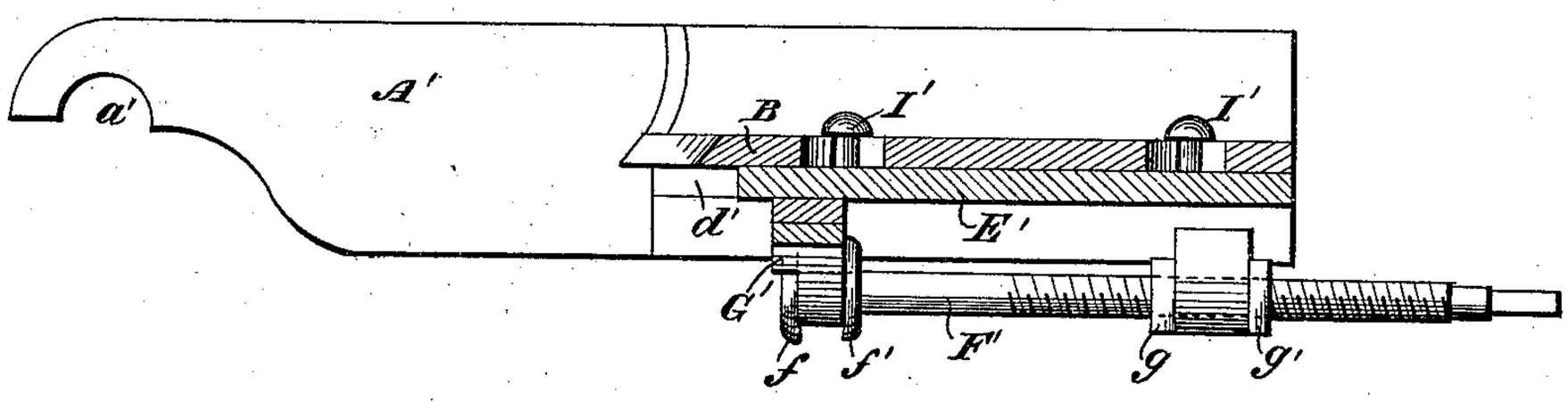


Fig 2.



WITNESSES

Franck L. Durand

Wm A Skinkle

By their Attorney

INVENTORS,

Herbert R Smith

Nicholas K Wade.

Wm D. Baldwin

2 Sheets—Sheet 2.

H. R. SMITH & N. K. WADE.

CORE-STRIKER.

No. 176,760. Patented May 2, 1876.

Fig. 3.

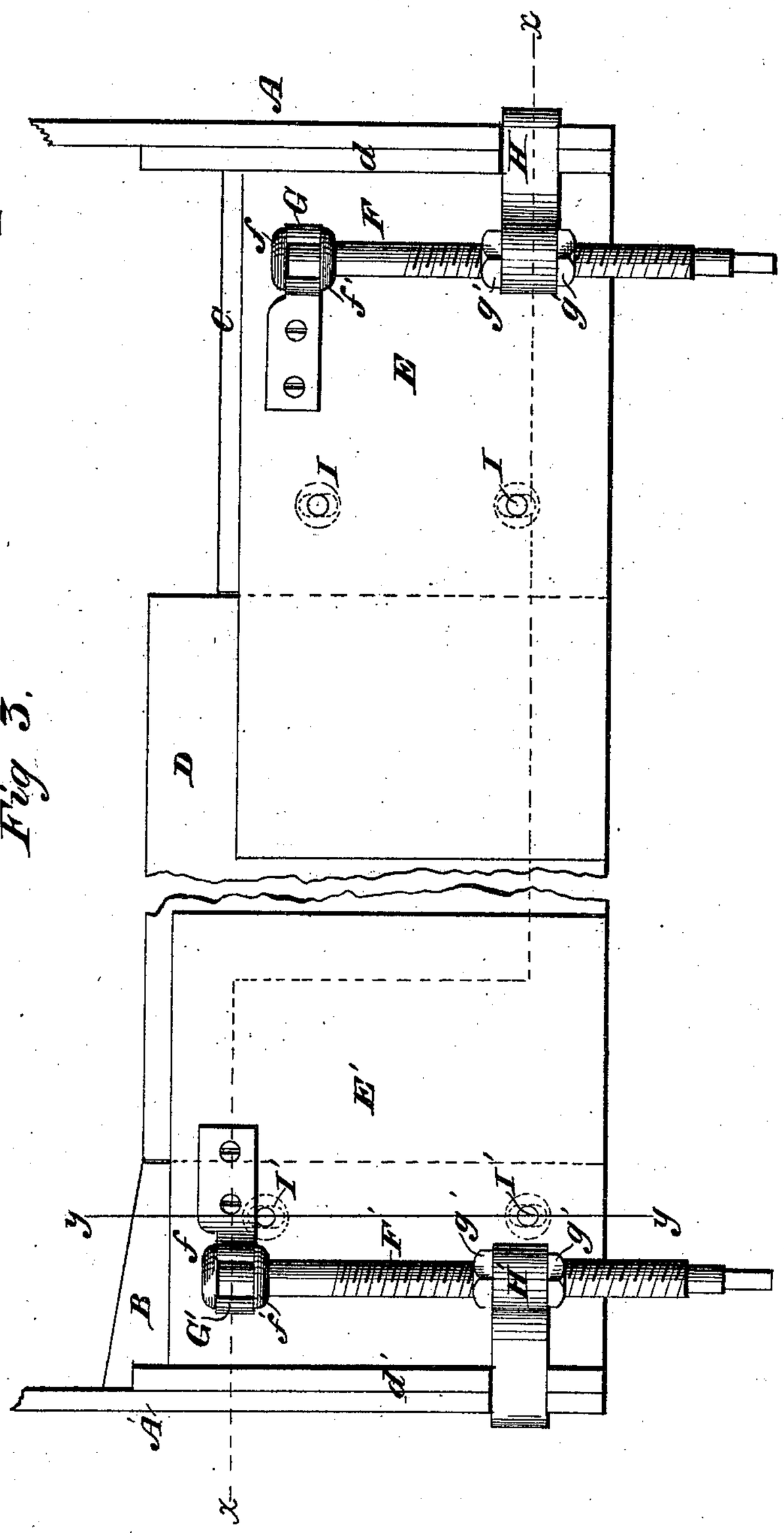
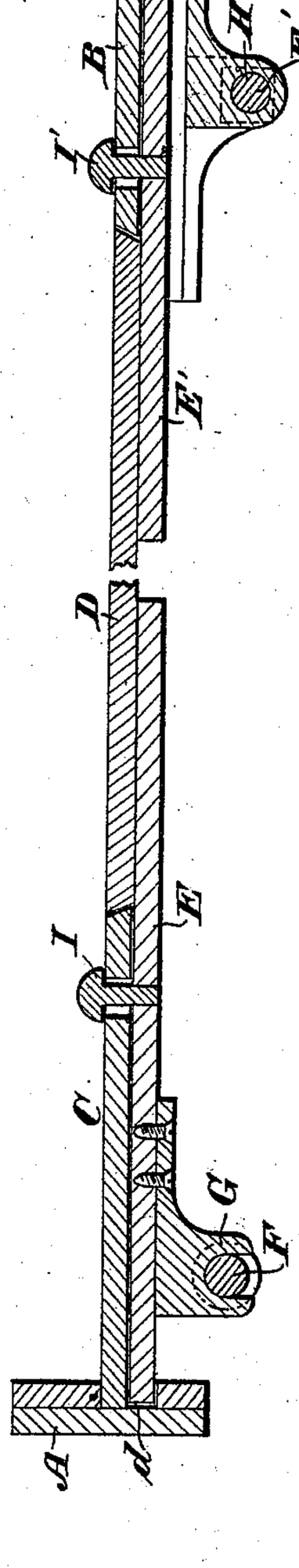


Fig. 4.



WITNESSES

Franck L. Ourand

Wm A Skinkle

By their Attorney

INVENTORS,

Herbert R Smith

Nicholas K Wade

Wm D. Baldwin

UNITED STATES PATENT OFFICE.

HERBERT R. SMITH AND NICHOLAS K. WADE, OF COLUMBUS, OHIO.

IMPROVEMENT IN CORE-STRIKERS.

Specification forming part of Letters Patent No. **176,760**, dated May 2, 1876; application filed March 1, 1876.

To all whom it may concern:

Be it known that we, HERBERT R. SMITH and NICHOLAS K. WADE, both of Columbus, in the county of Franklin and State of Ohio, have invented certain new and useful Improvements in Core-Strikers for Pipe-Molding, of which the following is a specification:

Our invention relates to adjustable core-boards or strikes, in contact with which are revolved the cores for regulating the size of the cores used in casting iron pipe; and our objects are to construct a core-strike of this class in sections in such manner that its body or central part may be adjusted independently of its ends for forming the taper part and enlargement or bowl of the core, and so that the taper part of the strike at one end, and that portion at its opposite end which forms the enlargement at the upper end of the core, shall remain constant or unvarying in size, while admitting of the size of the core between these parts being varied, by the adjustment of the body or main section of the strike, to form cores for light or heavy pipe of any desired thickness between the bowl or lead space and opposite end, while leaving the lead-room the same for all pipe of the same exterior diameter.

The subject-matter claimed will hereinafter specifically be designated.

In the accompanying drawings, Figure 1 represents a view in perspective, on a reduced scale, of our improved strike adjusted for use upon the core-bar; Fig. 2, a transverse section on the line *y y* of Fig. 3; Fig. 3, an inverted plan or view of the under side of the strike, a part of the body being broken away; and Fig. 4, a longitudinal section on the line *x x* of Fig. 3.

Supporting-arms or holding-bars A A′ are provided at their outer ends with sockets or hooks *a a′*, to fit upon the core-bar, as shown in Fig. 1, while at their inner ends they are respectively secured rigidly to or formed with the end sections of the strike composed of a taper-edged plate, B, and straight-edged plate C, for forming or shaping the conical end *b*, and head or enlargement *c* of the core, which respectively form the core print and the bowl or bell of the pipe. Between the end plates or sections B and C of the strike the straight-edged body or main section D is adjustably secured, so as to move in and out. This adjustment is attained, in this instance, by means of guide-grooves or supporting-ways *d d′* in the holders or supporting-arms, in which ways the ends of sustaining-plates E E′, formed with or rigidly secured to the ends of the body D of the strike, fit so as to be moved in and out by means of screws or threaded bolts F F′, secured at their outer ends so as to turn freely, but have no endwise movement in sockets G G′, in brackets respectively attached to the under side of the fixed plates B and C, while the threaded portions of the bolts work in female screws in brackets H H′, rigidly secured to the holders A A′. The endwise movement of the screw-bolts in their sockets G G′ is shown as prevented by means of collars *f f′* at either side of each of the sockets. Headed studs or pins I I I′ I′, rigidly secured to the body-sustaining plates E E′, pass through slots in the fixed sections B and C, and move back and forth in the slots, with their heads resting on the surface of the fixed sections, as the central section or body D is adjusted.

In operation, the strike is adjusted to suit the work to be done by turning the screw-bolts so as to move the body D, and is set in the desired position by the jam-nuts *g g′*, at the sides of the brackets H H, in which the bolts work, the hooks fitted over the core-bar J, suitably supported, and the bar and core thereon revolved, while the strike is properly supported to reduce and render uniform the outside of the core between the tapered end and head. The beveled edge of the strike scrapes off the outside of the core, as usual, the sand falling on the surface of the strike, from whence it may be returned to the core as often as required to complete the operation.

From the foregoing description it will be seen that while the section composing the central or main portion of the core strike or board may readily be adjusted, the plates forming the end sections B and C are fixed to the arms A A′, so as always to remain in the same position relatively thereto to form cores for pipe of a given external diameter with the same-sized bowl or bell for forming the lead space, whether the strike is adjusted for finishing the cores for thick or for thin pipe.

We claim as of our own invention—

1. A sectional core-strike, constructed substantially as set forth, with a central part or body section adjustably secured to supporting arms or holders, and movable independently of its end sections.

2. The combination, substantially as hereinbefore set forth, of the supporting-arms, the fixed sections secured thereto, and the adjustable body section of the strike, moving in and out between the fixed sections.

3. The combination, substantially as hereinbefore set forth, of the supporting-arms, the adjustable body of the strike, the fixed end sections thereof, the screw-bolts and the studs, moving with the body and working in slots in the fixed sections.

In testimony whereof we have hereunto subscribed our names.

HERBERT R. SMITH.
NICHOLAS K. WADE.

Witnesses:
T. P. OGDEN,
GEO. F. SOUTHARD.