

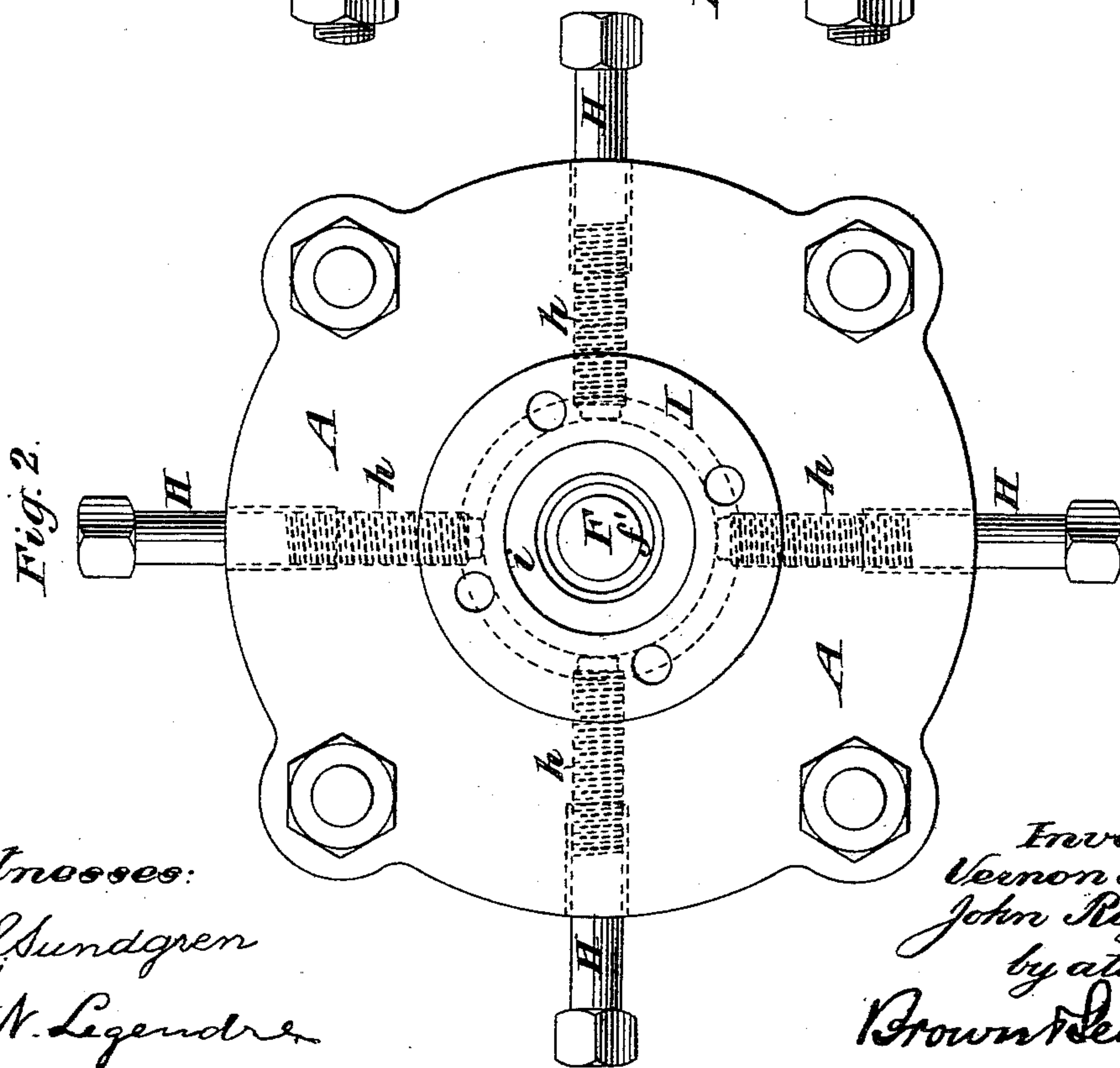
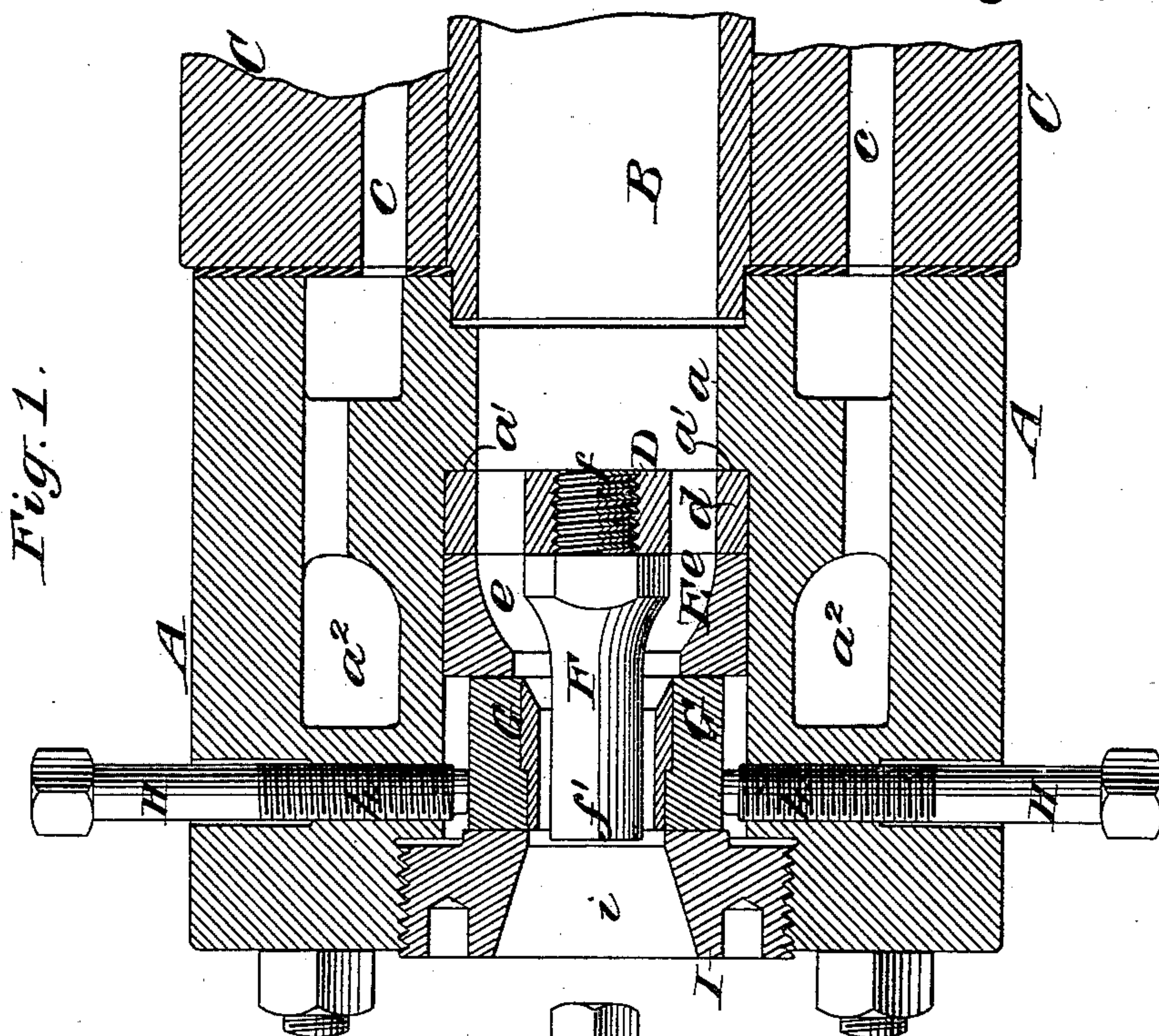
(No Model.)

V. ROYLE & J. ROYLE, Jr.

MACHINE FOR COVERING WIRES, CABLES, &c., AND FOR MAKING
TUBING AND CORD.

No. 457,482.

Patented Aug. 11, 1891.



Witnesses:

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UNITED STATES PATENT OFFICE.

VERNON ROYLE AND JOHN ROYLE, JR., OF PATERSON, NEW JERSEY.

MACHINE FOR COVERING WIRES, CABLES, &c., AND FOR MAKING TUBING AND CORD.

SPECIFICATION forming part of Letters Patent No. 457,482, dated August 11, 1891.

Application filed January 10, 1891. Serial No. 377,333. (No model.)

To all whom it may concern:

Be it known that we, VERNON ROYLE and JOHN ROYLE, Jr., both of Paterson, in the county of Passaic and State of New Jersey, have invented a new and useful Improvement in Machines for Covering Wires, Cables, &c., and for Making Tubing and Cord, of which the following is a specification.

Our invention relates to an improvement in machines for covering wires, cables, &c., and for making tubing and cord in which material in a soft or plastic state is forced continuously around a core within a die.

The object of our present invention is to so construct and locate the core, core-supporting bridge, and die as to form a tight joint between the core-bridge and its seat and permit the ready adjustment and removal of the die and core and at the same time to locate the die well within the surrounding jacket.

A practical embodiment of our invention is represented in the accompanying drawings, in which—

Figure 1 represents a longitudinal section through the press-head and portion of the jacketed cylinder in proximity thereto, showing the core, core-bridge, and die in position within the press-head, and Fig. 2 is an end view of the press-head.

As our present invention relates only to the structure and arrangement of the core, core-bridge, and die relatively to the press-head, the other parts of the machine are not herein shown and may be of any suitable structure—such, for example, as that shown in Letters Patent No. 325,363, granted to us September 1, 1885.

A represents the press-head abutting at its inner end against the pressure-screw cylinder B and the trunk or jacket C, which surrounds the cylinder B. The press-head A is provided with a bore *a*, extending longitudinally therethrough and forming a prolongation of the bore within the pressure-screw cylinder B. The bore *a* is enlarged from its outer end inwardly to receive the core-bridge D and reducing-piece E, forming shoulders *a'* at the inner end of the enlarged portion, against which the rim *d* of the core-bridge is intended to abut. The core-bridge D is formed of such sizes as to fit snugly within the enlarged por-

tion of the bore *a* and the rear side of its rim *d* is fitted by a tight joint to the face of the shoulder *a'*. The reducing-piece E hereinbefore referred to is also fitted snugly within the enlarged portion of the bore *a*, and is provided with an interior bore *e*, which at its inner end registers with the opening through the core-bridge D, but gradually contracts toward its outer end for the purpose of directing the material being forced therethrough into proximity to the core at the point where it enters the mouth of the die.

The core is denoted by F and is screwed into the center portion of the core-bridge D, as shown at *f*. Its free end *f'* projects outwardly within the opening in the die G. The die G is of less diameter than the enlarged portion of the bore *a*, so as to permit of its being adjusted laterally with respect to the fixed core F. The means by which the said die G is adjusted consist in the present instance of screws H, preferably four, located at equal intervals along its periphery and seated in threaded sockets *h*, radiating from the longitudinal axis of the press-head. The joints between the reducing-piece and core-bridge and between the die and reducing-piece are intended to be fitted with precision and are kept tightly closed, and the core-bridge, reducing-piece, and die held in position within the press-head against outward displacement by means of a clamp-nut I, which is arranged to screw into a still further enlarged portion of the bore *a* at its outer end. The nut I is provided with a gradually-expanding opening *i*, leading outwardly from the bore in the die.

The press-head A is provided with a chamber *a²*, forming an extension of or communication with the trunk or jacket *c* for the purpose of admitting steam into proximity to the point where the material is forced around the core through the die, so that in cases where it is desired to keep the material from becoming chilled it may be accomplished by the introduction of steam in such chamber at the desired temperature.

It will be observed that by the above construction the core-bridge with the core fixed thereto is seated snugly and firmly within the press-head, the material is directed by a grad-

ually-contracted annular space toward the mouth of the die, and the die, reducing-piece, and core-bridge are held firmly in position within the press-head and the joints tightly closed by means of the clamp-nut I.

To adjust the die laterally the clamp-nut I may be slightly loosened and the screws H manipulated to move it into the desired adjustment. To remove the several parts for the purpose of interchanging them for others or for cleaning, the clamp-nut I may be removed and the screws H turned outwardly, leaving a free passage for sliding the several parts out.

What we claim is—

1. The combination, with the pressure-screw cylinder, the fixed core-bridge seated across the opening at the mouth of said cylinder, and the core fixed to the core-bridge and extending in alignment with the longitudinal axis of the cylinder, of the laterally-adjustable die, substantially as set forth.

2. The combination, with the core-bridge and the die and means for securing them in position, of the reducing-piece interposed be-

tween the core-bridge and die, substantially as set forth.

3. The combination, with the press-head provided with an enlarged bore extending from its outward end inwardly and having an abutment at the inner end of said bore, of a core and a die seated within said bore and a clamping device for holding them snugly in position therein, substantially as set forth.

4. The combination, with the press-head provided with a bore extending from its outer end inwardly, of a core-bridge and core, a reducing-piece, and a die located within the bore, a clamping device seated within the outer end of the bore and adapted to hold the said parts against displacement longitudinally of the bore, and means for adjusting the die laterally within the bore, substantially as set forth.

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Witnesses:

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