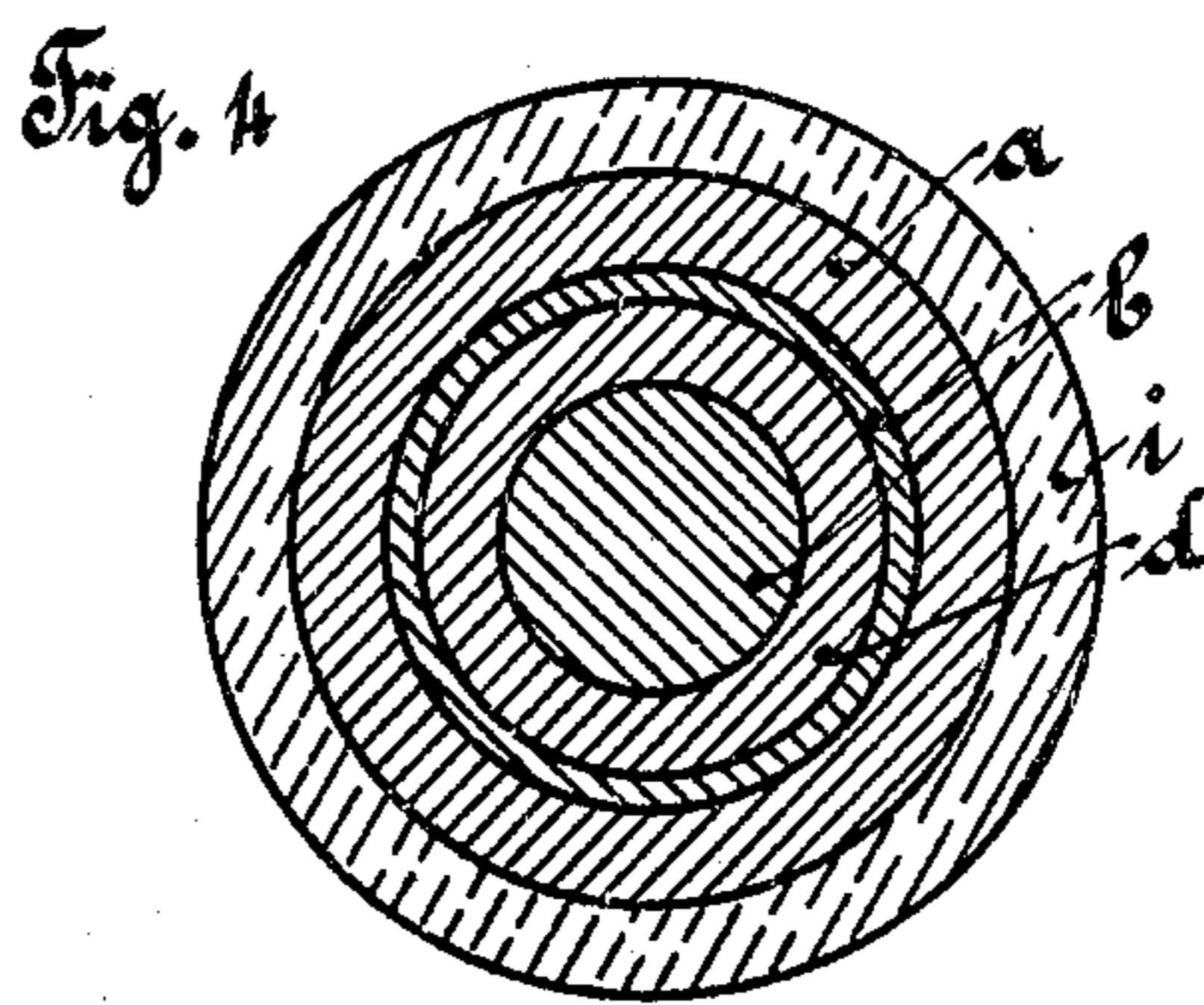
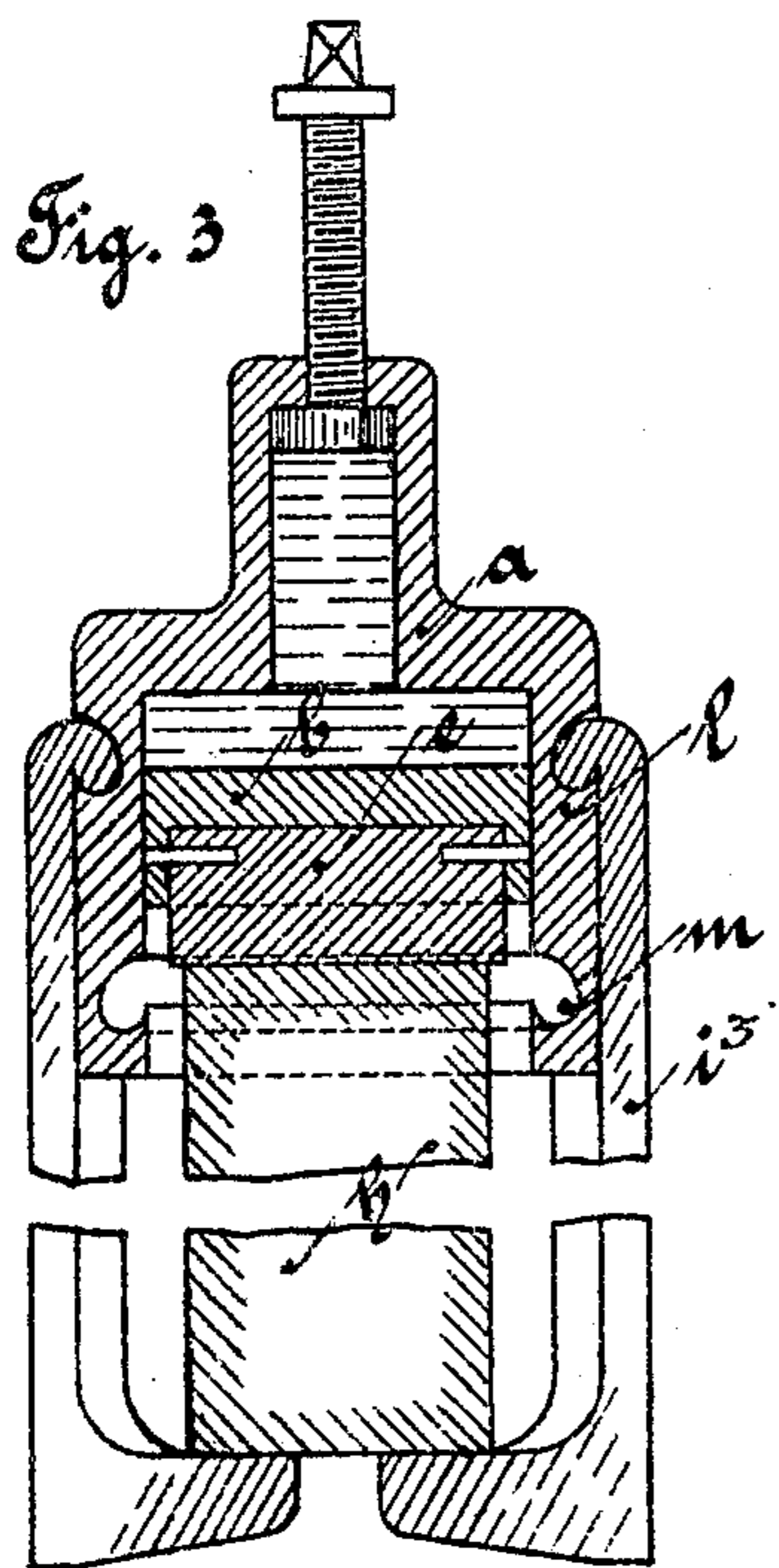
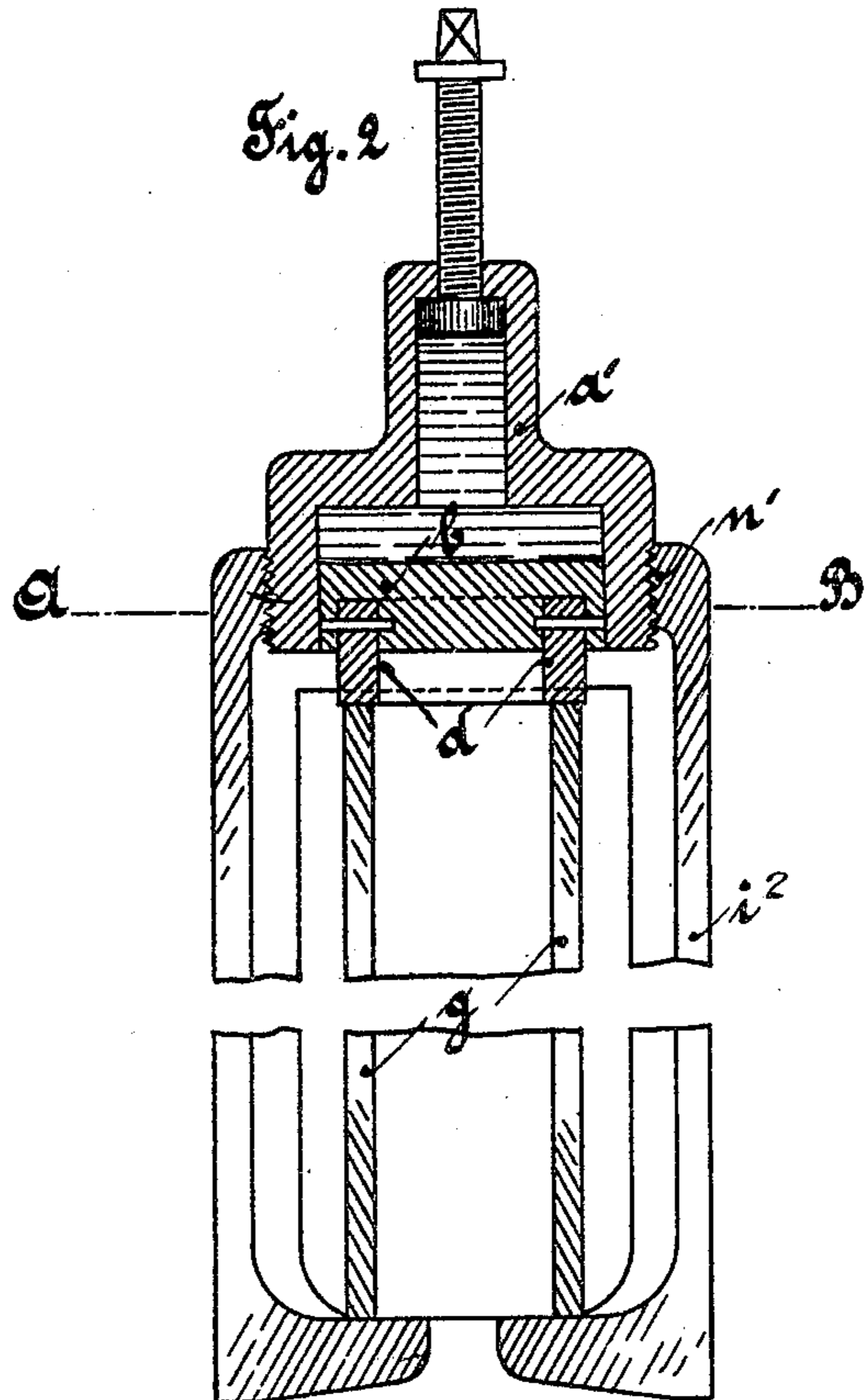
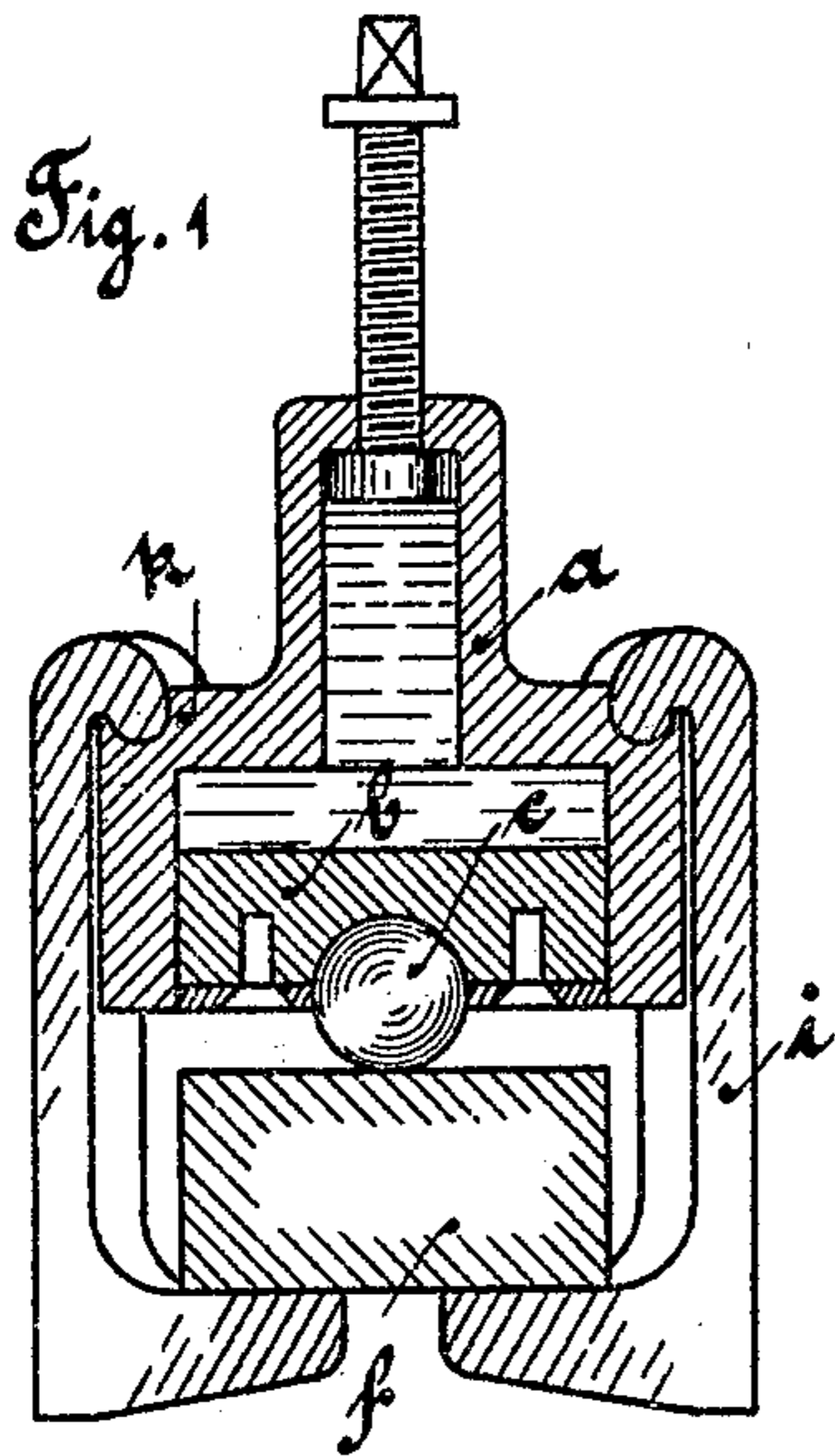


H. HUBER.

FASTENING DEVICE FOR TRANSPORTABLE HYDRAULIC PRESSES.

APPLICATION FILED AUG. 5, 1903.

2 SHEETS—SHEET 1.



Witnesses.

C. Heymann.
R. Winter.

Inventor.

Heinrich Huber
by P. Singer.

Att'y.

No. 798,284.

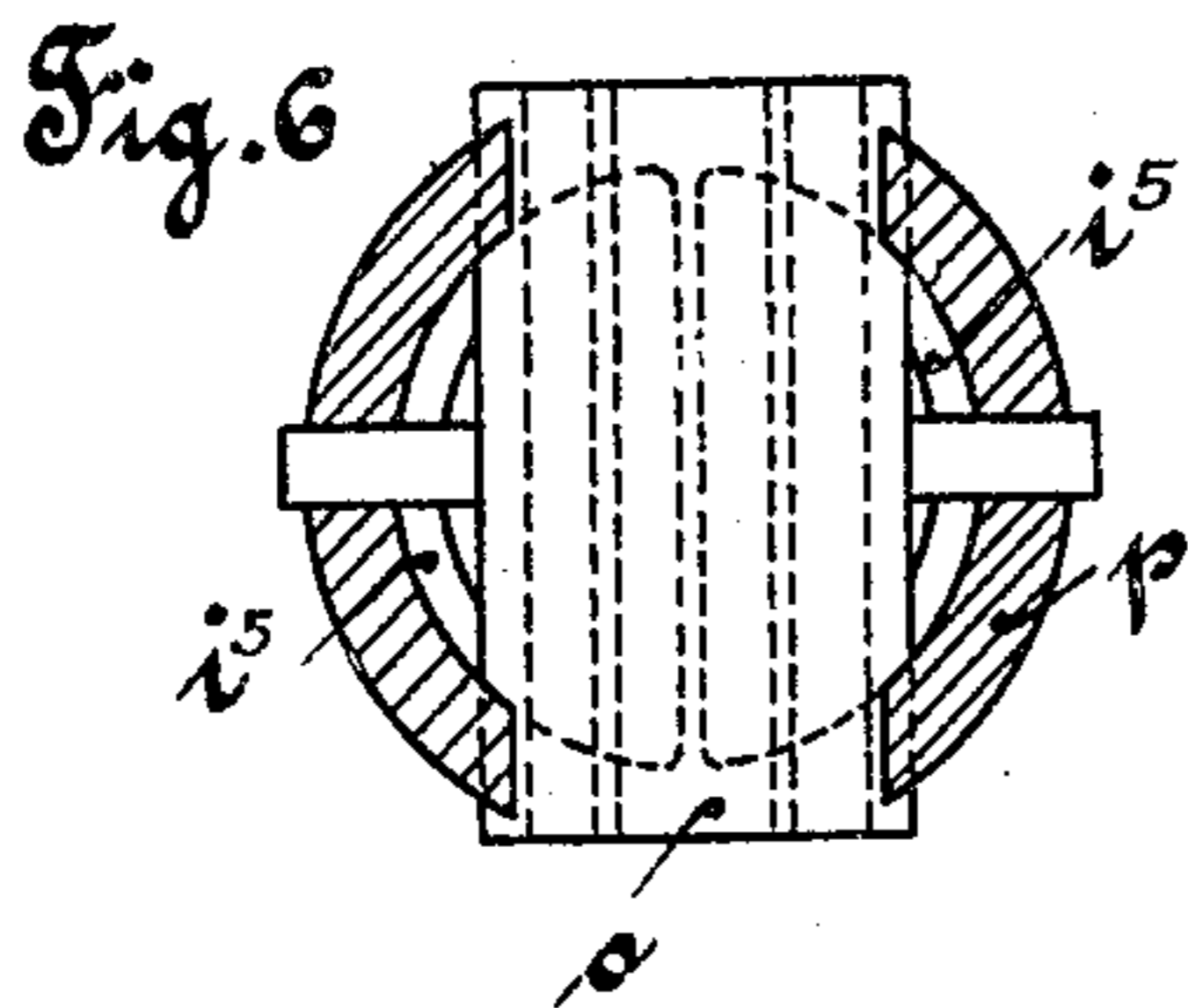
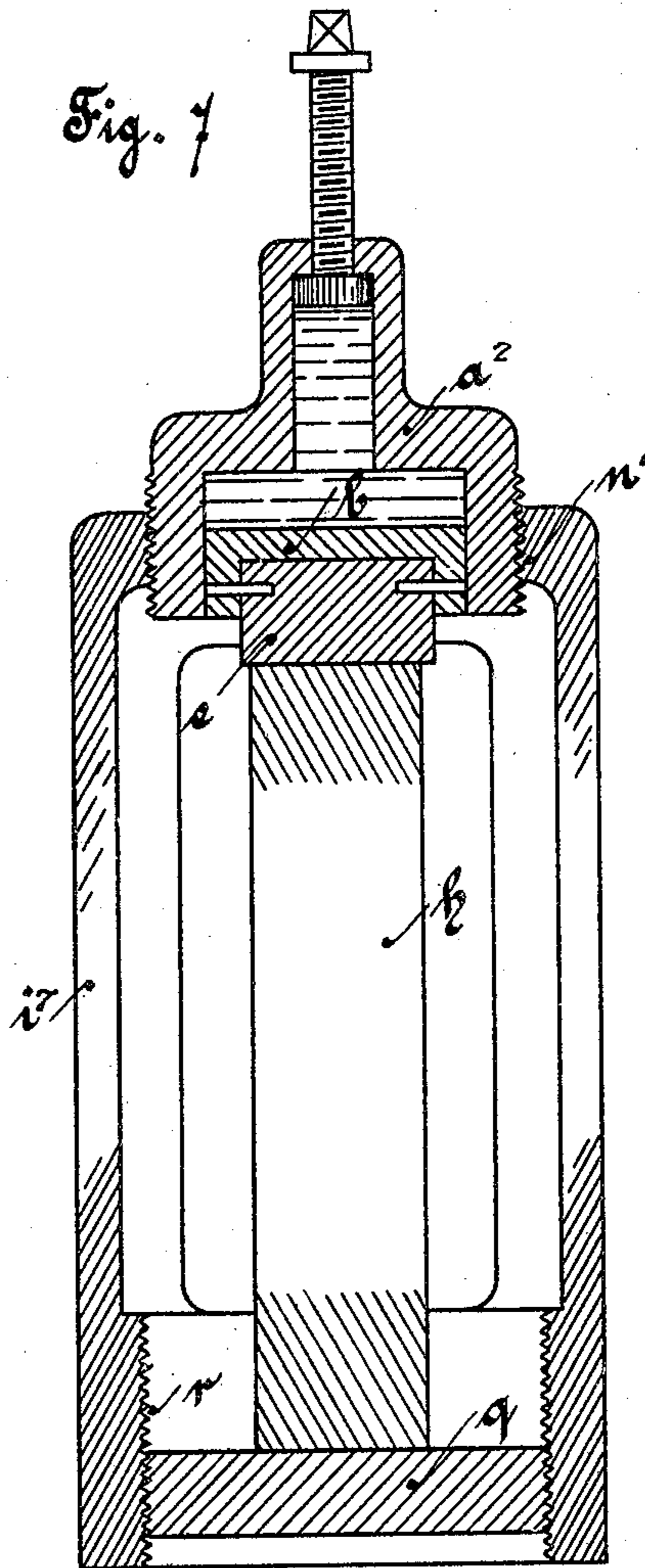
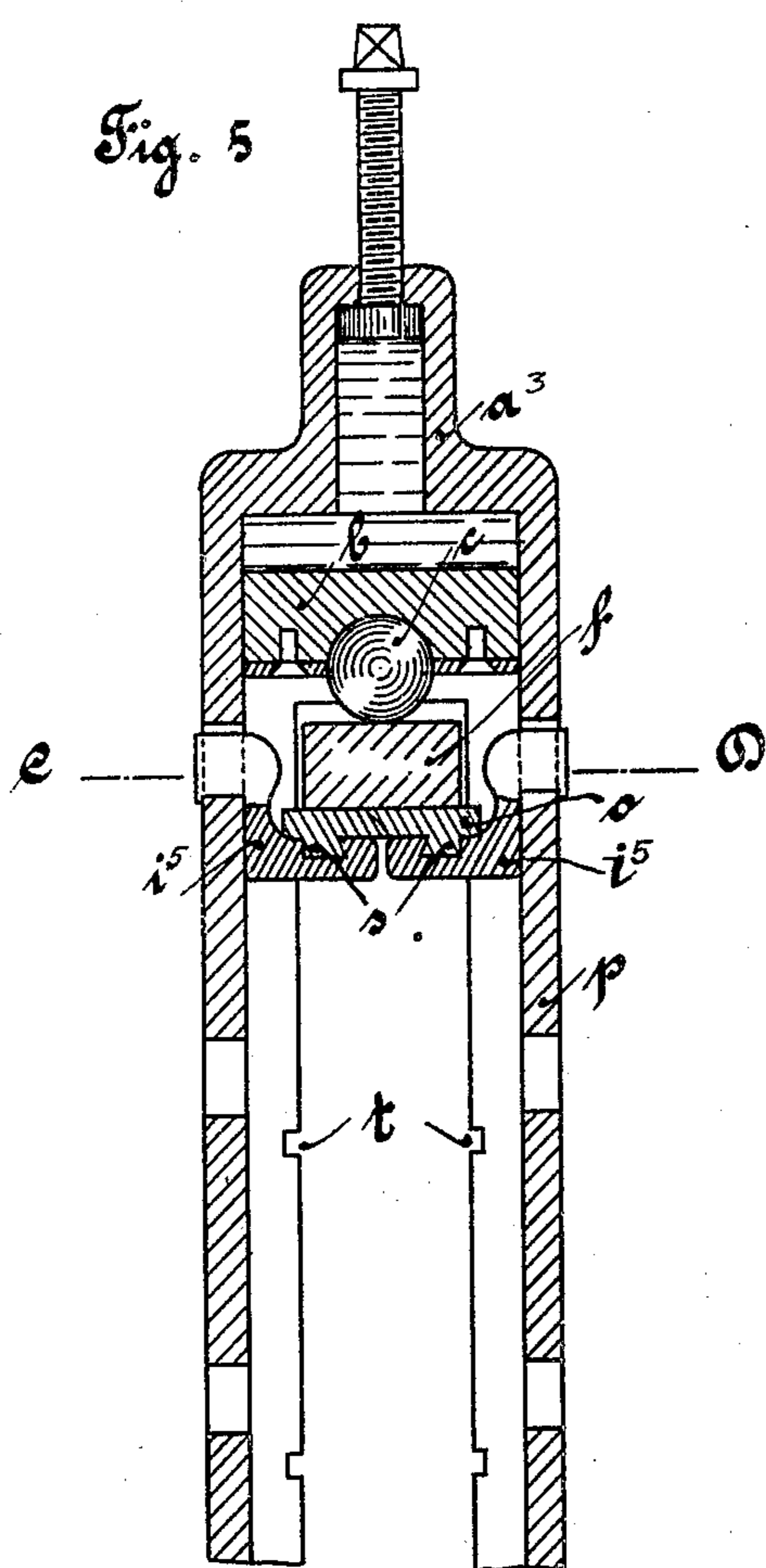
PATENTED AUG. 29, 1905.

H. HUBER.

FASTENING DEVICE FOR TRANSPORTABLE HYDRAULIC PRESSES.

APPLICATION FILED AUG. 5, 1903.

2 SHEETS—SHEET 2.



Witnesses.

E. Hermann.
R. Winter

Inventor.

Heinrich Huber

by P. J. Singer

Att'y.

UNITED STATES PATENT OFFICE.

HEINRICH HUBER, OF FRANKFORT-ON-THE-MAIN, GERMANY.

FASTENING DEVICE FOR TRANSPORTABLE HYDRAULIC PRESSES.

No. 798,284.

Specification of Letters Patent.

Patented Aug. 29, 1905.

Application filed August 5, 1903. Serial No. 168,291.

To all whom it may concern:

Be it known that I, HEINRICH HUBER, a subject of the German Emperor, and a resident of Frankfort-on-the-Main, Germany, have invented a certain new and useful Fastening Device for Transportable Hydraulic Presses, of which the following is a specification.

The object of the present application is an apparatus for fixing transportable hydraulic presses to the work pieces or objects to be subjected to the pressure, as rails, blocks, pillars, tubes, or such like, which in order to ascertain strength, elasticity, temper, or in view of a deformation, reduction of volume, punching of holes, riveting, coining, or on any other purpose are to be subjected to the pressure of the transportable hydraulic press.

The chief characteristic of the present invention consists in providing means for adjusting the different parts of the apparatus for fitting articles of different thickness which are to be operated upon.

In the accompanying drawings, Figures 1-3, 5, and 7 are vertical sections through three different forms of the device; Fig. 4, a section along the line A B of Fig. 2; Fig. 6, a section along the line C D of Fig. 5 with the block *f* removed.

The piston *b* moves in a cylinder *a*, connected in the usual way to a pump or a high-pressure pipe. This piston is joined according to its purpose to a ball *c*, Fig. 1, a press-ring *d*, Fig. 2, a press-plate *e*, Fig. 3, a punch, a dolly, a coin stamp or matrice corresponding to its use for solid pieces *f* and *h*, Figs. 1, 3, 5, and 7, or pipes *g*, Figs. 2 and 4, &c. Instead of different pistons fitted with the aforesaid stamps a single press-piston may be employed. This piston is then fitted on the top with a device, allowing a change of the stamps *c d e*, &c. The work-pieces *f g h*, &c., are now fastened to the pressure-cylinder by the hangings *i* in a most simple and solid way. For this purpose the cylinder *a* is fitted on the top with the groove *k*, Fig. 1, or on the cylindrical in or out side with the grooves *l* and *m*, Fig. 3, into which the corresponding ends of

the hangings *i*³ are hooked, or the outside of the cylinder *a'* *a*² is provided with the thread *n' n'*, Figs. 2 and 7, into which may be screwed the inner thread of the hanging *i*² *i*⁷.

In Figs. 5 and 6 a further modification is represented, at which the cylinder *a*³ terminates downward in two lengthenings *p*. The hangings *i*⁵, with an under plate-shaped support, are kept together by a plate *o*, which gears together with dovetails *s* into corresponding holes of both hangings. A lateral yielding of the hangings *i*⁵ is prevented by the dovetails and by the lengthenings of the walls of the cylinder themselves against which the hangings *i*⁵ lean with their hind wall and which possesses on account of their semicircular section a great momentum of resistance. Thereby the plate *o* rests laterally upon the hangings *i*⁵, and, further, lies in holes *t* of the walls of the cylinder, so that the momentum of flexion arising in the plate-shaped support of the hangings *i*⁵ is considerably reduced. The lengthenings may be chosen sufficiently long to agree with all lengths of the work-pieces *f g h*, &c., taken into consideration.

Lastly, Fig. 7 shows a type of hangings the under part of which is formed in such a way that the supporting-plate *q* of the work-piece *h* may be moved up and down in it, thus allowing to take into account the various lengths of the work-piece *h*. The moving of the plate *q* in axial direction may be obtained by any one of the well-known approved devices.

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

The combination with a portable hydraulic press, of removable hangers adapted to engage with said press in an adjustable position to support the piece to be operated upon.

In testimony whereof I have hereunto set my hand in presence of two witnesses.

HEINRICH HUBER.

Witnesses:

ERNST PFESTROFF,
JEAN GRUND.