

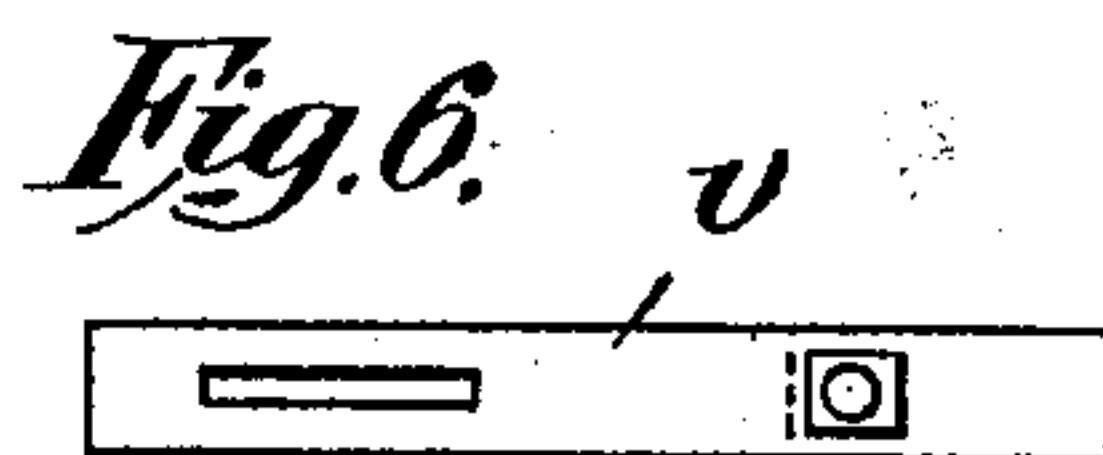
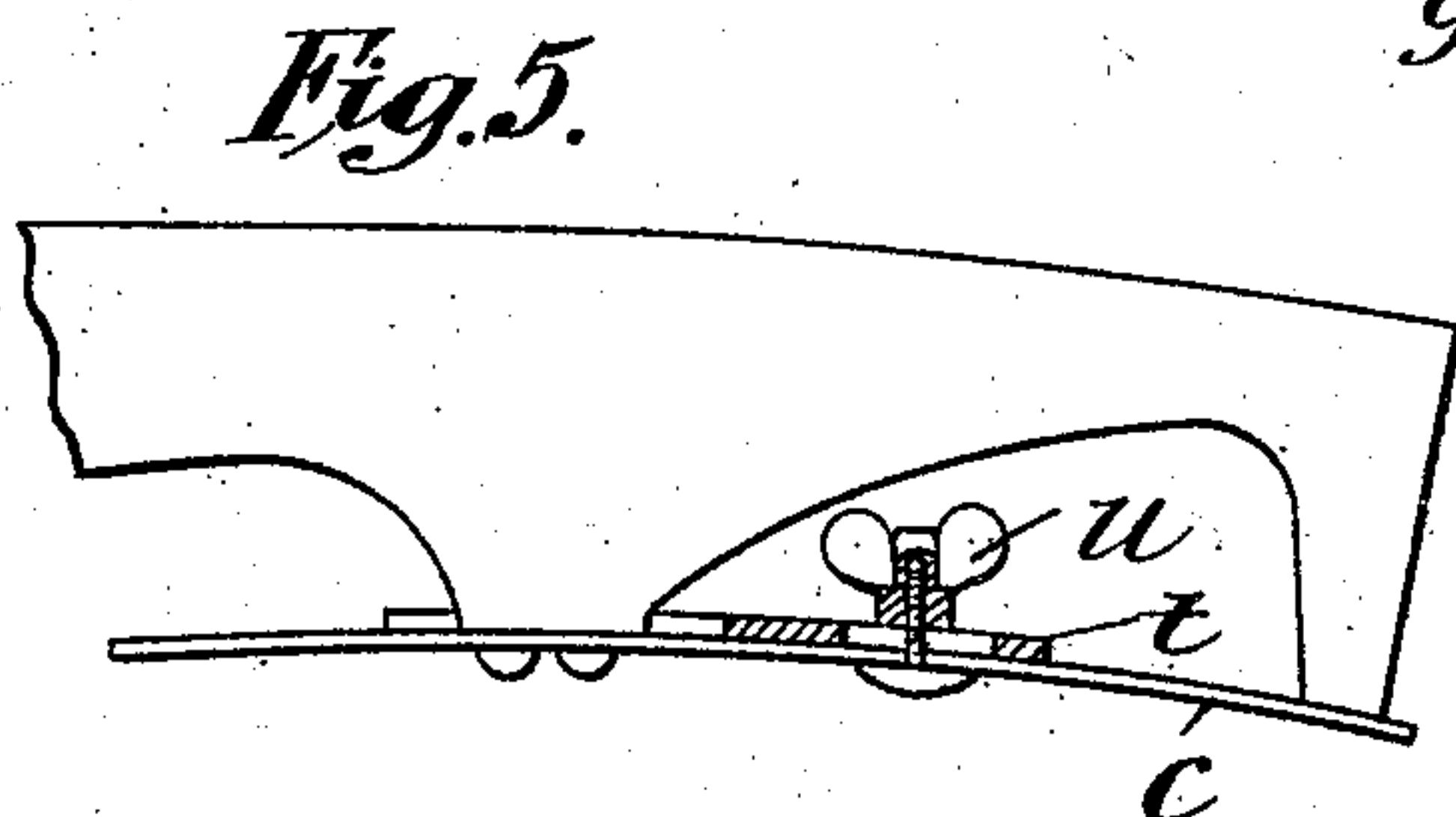
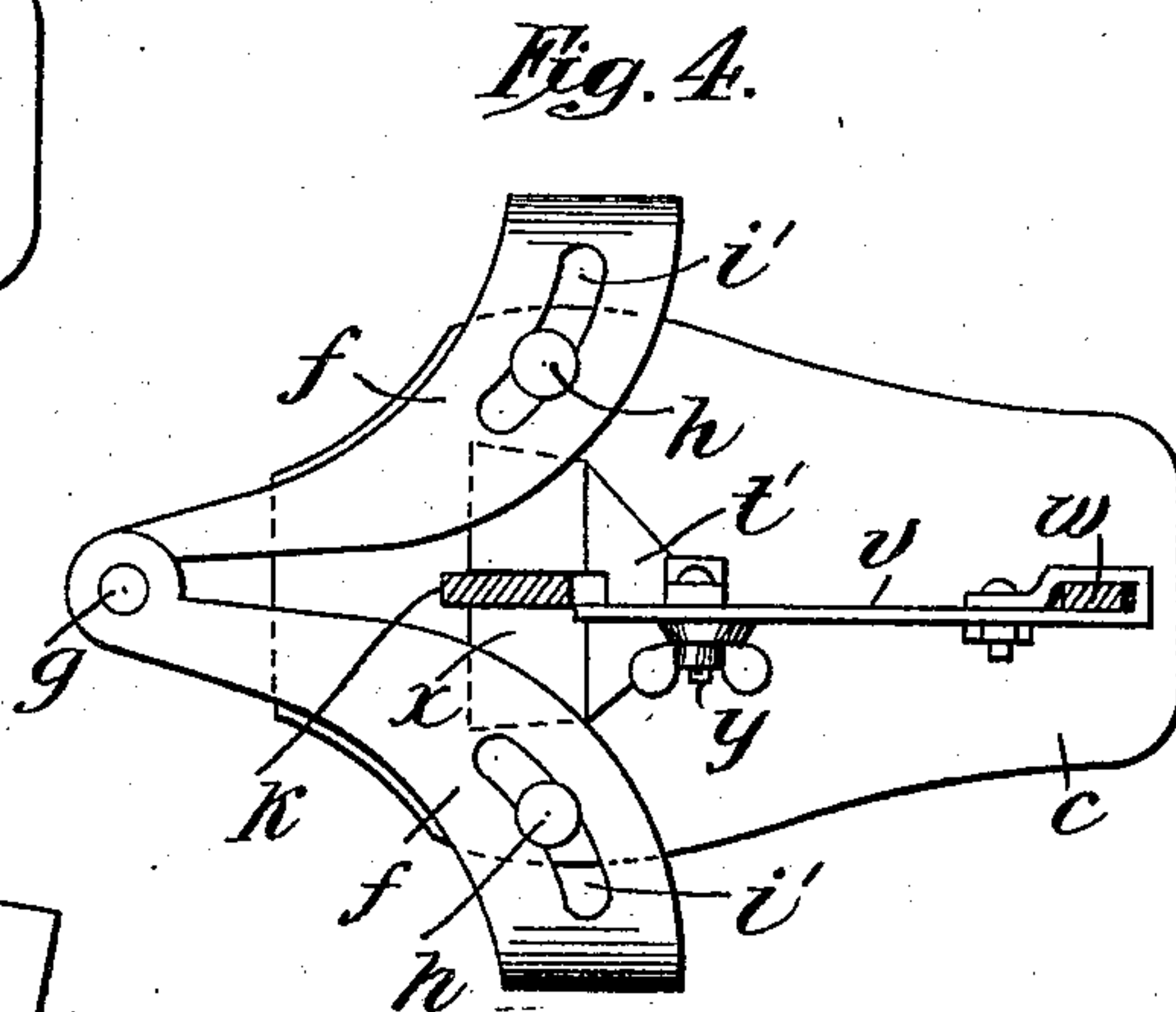
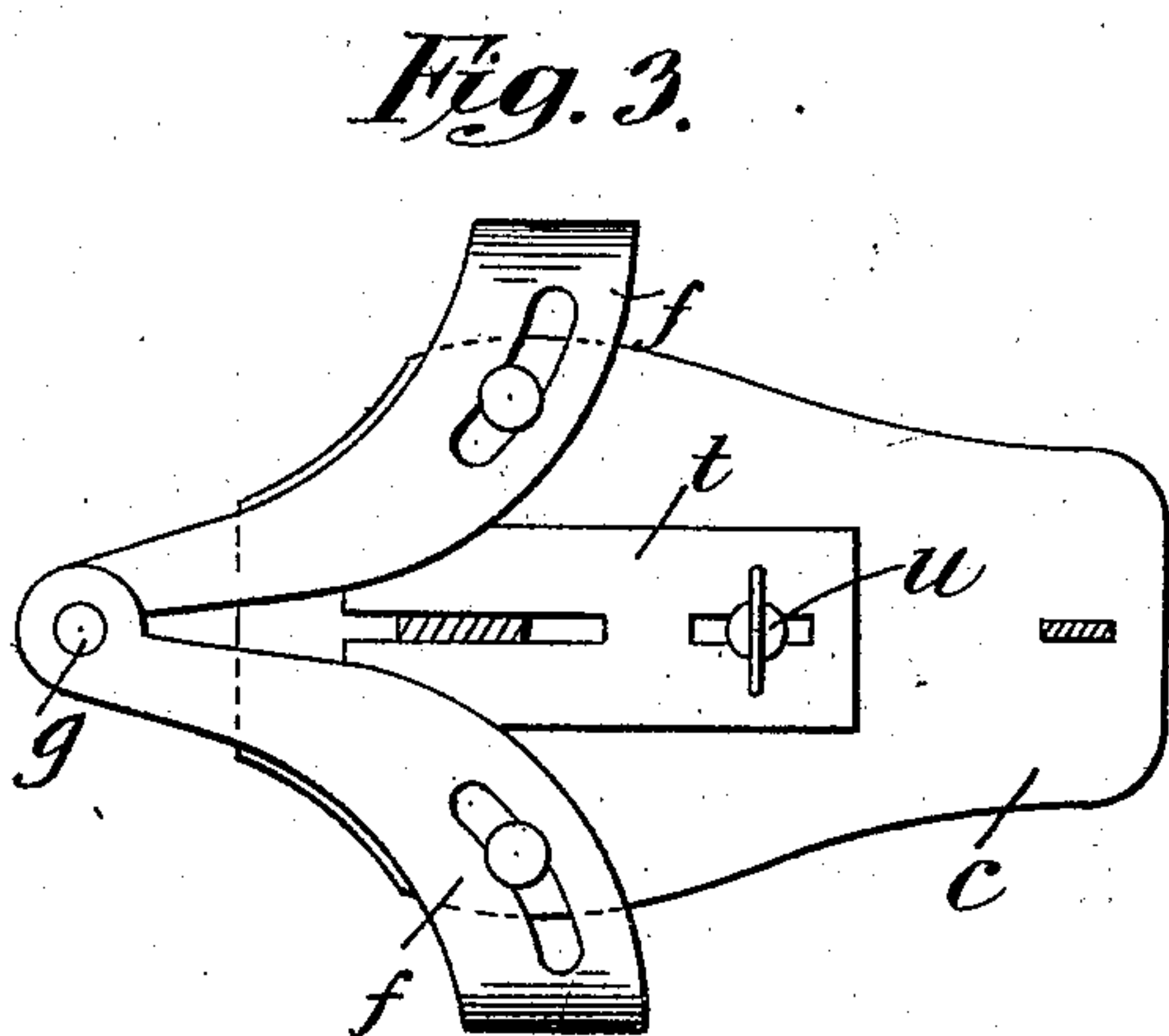
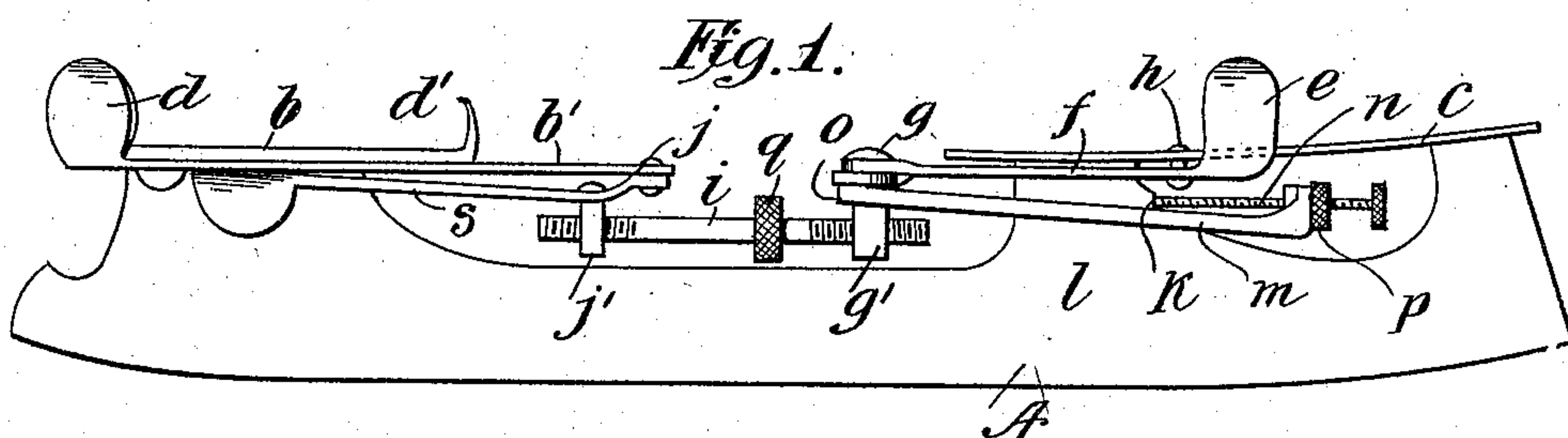
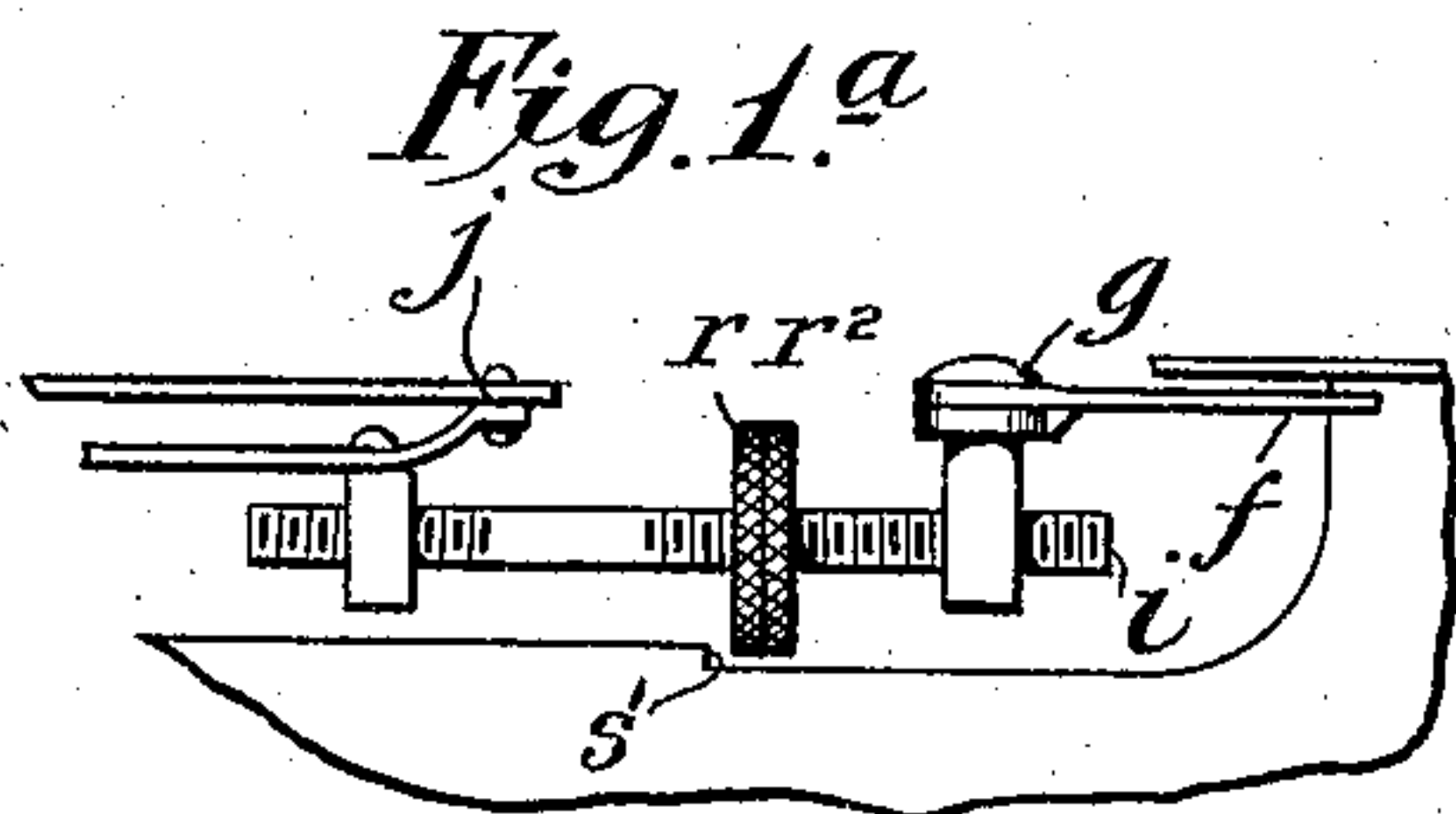
No. 814,879.

PATENTED MAR. 13, 1906.

H. A. SILVERA.

SKATE.

APPLICATION FILED FEB. 23, 1905.



Attest:

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Atty

UNITED STATES PATENT OFFICE.

HERBERT A. SILVERA, OF NEW YORK, N. Y.

SKATE.

No. 814,879.

Specification of Letters Patent.

Patented March 13, 1906.

Application filed February 23, 1905. Serial No. 246,905.

To all whom it may concern:

Be it known that I, HERBERT A. SILVERA, a citizen of the United States of America, and a resident of the borough of Brooklyn, New York city, and State of New York, have invented certain new and useful Improvements in Skates, of which the following is a specification.

My invention relates to the clamps for securing the skate to the shoe; and it consists of controlling means adapted for application to skates in use whereby in a skate in which both the toe-clamps and the heel-clamps are tightened by one lever the tightening of the toe-clamps will be limited when sufficiently tight to hold onto the sole of the shoe before the lever reaches its "home" position and the rest of the grip will be expended on the heel for preventing undue pinching of the ball of the foot when the resistance of the sole to the grip of the clamp is less than at the heel and it is liable to collapse and pinch the foot uncomfortably, as hereinafter described, reference being made to the accompanying drawings, in which—

Figure 1 is a side elevation of a skate provided with my improved clamp-controlling attachment in one form of application. Fig. 1^a is a detail in side elevation showing a modification. Fig. 2 is a plan view of part of the attachment as applied in Fig. 1. Fig. 3 is a plan view of the sole plate and clamp inverted and showing a modified form of clamp-controlling attachment. Fig. 4 is another plan view of the sole plate and clamp with another modification of the clamp-controlling attachment. Fig. 5 is a side elevation of part of the skate and sole-plate inverted and a longitudinal section of the clamp-controlling attachment of Fig. 3. Fig. 6 is a detail of the controlling device of Fig. 4 in side elevation.

A represents the runner of the skate, *b* the heel-plate, and *c* the sole-plate, said sole and heel plates being fixedly attached to the runner in the usual manner. The heel-clips *v* are carried on the jaws *b'*, which are pivoted together at *j*, and the toe-clips *e* are carried on the jaws *f*, which are pivoted together at *g* and suspended under plate *c* by the heads of the studs *h*, inserted through curved slots *i'* of the jaws and fixedly set in the under side of the sole-plate, so as to open and close the clips to some extent for gripping and releasing the sole according as the jaws are shifted forward or backward on the studs *h*. The

usual heel-clip *d'* being part of the heel-plate fixedly attached to the runner is also employed to engage the front of the heel. The pivot *g* carries the usual stud *g'*, projecting below the jaws, in which the clamp-adjusting screw *i* works, said screw also working in a stud *j'* pendent from lever *s* behind the pivot-rivet *j*, by which it is fulcrumed on the forward end of the heel-clamps *b'*.

In one form of my attachment I provide a suitable shoulder at *k* in the rear standard *l*, to which the sole-plate *c* is attached, and apply a yoke *m* with an adjusting-screw *n* bearing on said shoulder *k* and with its bow *o* engaging stud *g'*. The adjusting-screw *n* is provided with a check-nut *p*, which is to be so set that when the end of the screw draws against shoulder *k* by the action of lever *s* clips *e* will grip the sole of the shoe sufficiently tight and then further clamping movement will be arrested and thereafter the rest of the draw by the lever *s* will be expended on the clips *d* and *d'*, which owing to the greater stiffness of the heel of the shoe will not grip the foot of the wearer uncomfortably. In this case the collar *q* for turning the adjusting-screw *i* is fixedly attached to the screw; but in Fig. 1^a I show that by dispensing with the yoke *m* and applying check-nuts *r* and *r'* on the screw, said screw being threaded through the nuts, and providing the shoulders *s'* on the upper edge of the skate-runner, this shoulder and the nuts when adjusted properly and checked against each other serve the same purpose of arresting the draw on the clips *e* at the proper time and thereafter expending the action of the lever *s* on the heel-clips *d* and *d'*.

By another plan an adjustable wedge *t*, Figs. 3 and 5, may be placed between the jaws *f* under the sole-plate *c* to limit their clamping action, said plate being set and held in position by a clamp-screw *u*. The wedge may be constructed, as *t'*, Fig. 4, and be adjustably clamped to a bar *v*, yoked to the front standard *w* of the skate-runner, said wedge being provided with thin wing-plates *x*, reaching between the jaws *f* and the sole-plate *c* for holding the wedge up in position in a way allowing it to be shifted in its adjustable connection *y* with the bar *v*.

A signal feature of my invention is the independent adjustment of the toe and heel clamps without affecting their combined action except as herein described.

It will be seen that various contrivances

of devices may be employed for effecting the purpose of my invention, and I do not limit myself to any particular device, and an especial advantage of my invention is that it is applicable to skates of common construction with but little or no change of construction.

What I claim as my invention is—

1. A clamp-skate having toe and heel clamps operatively connected, and a stop in combination therewith, to arrest the closing action of the toe-clamps before the final closing action of the heel-clamps.

2. In a clamp-skate, the combination with

toe and heel clamps and a common operating device therefor, of a yoke connected to said toe-clamps and movable therewith, and an adjusting stop-screw carried by said yoke and arranged to coact with a fixed portion of the skate.

Signed at New York this 20th day of February, 1905.

HERBERT A. SILVERA.

Witnesses:

C. SEDGWICK,

FRANK B. VAN SICLEN.