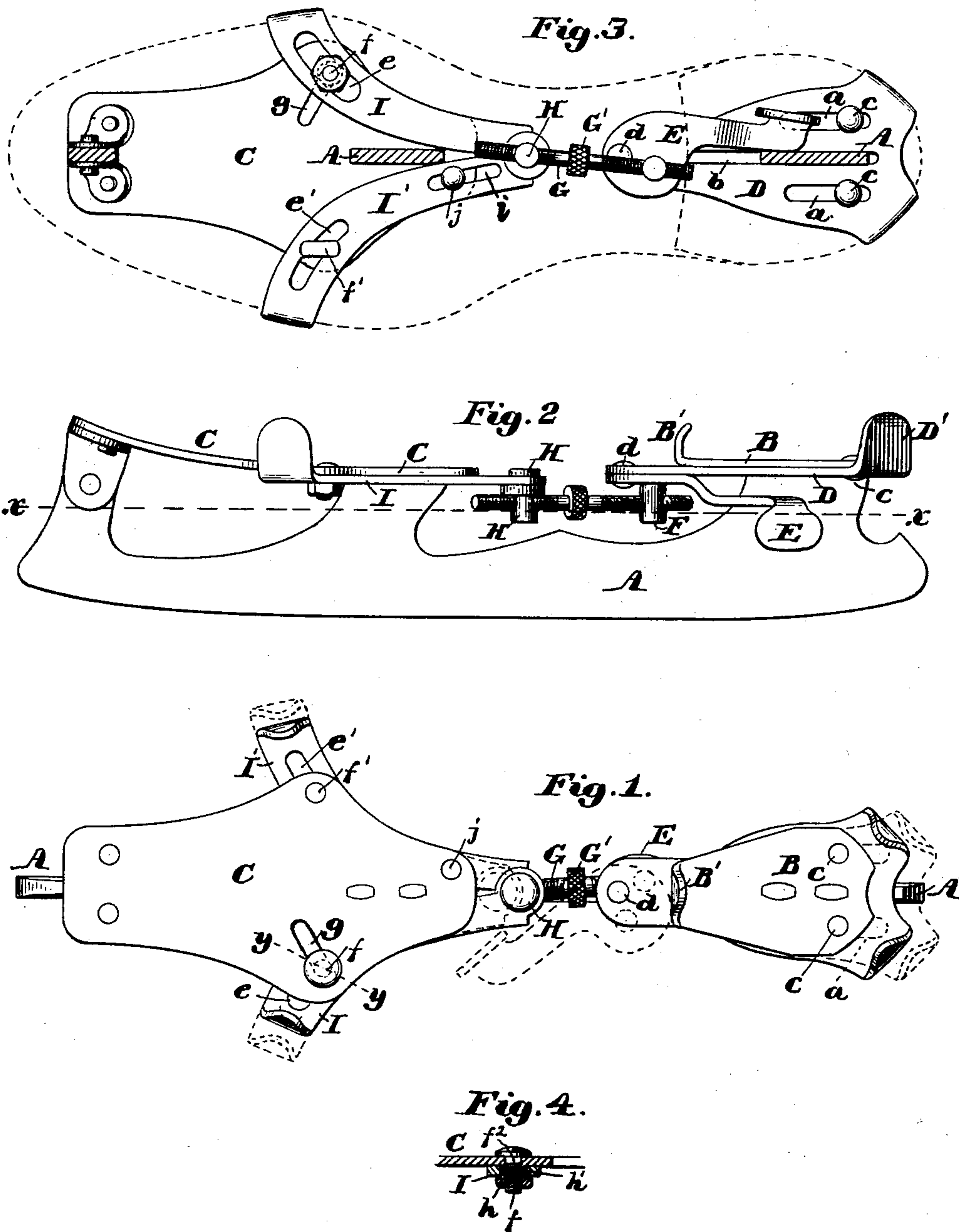


(No Model.)

G. W. PROUTY.
SKATE.

No. 593,494.

Patented Nov. 9, 1897.



Witnesses:

Walter E. Lombard.
William E. Shaw.

Inventor:

George W. Prouty
by N. P. Lombard
Atty.

UNITED STATES PATENT OFFICE.

GEORGE W. PROUTY, OF MEDFORD, MASSACHUSETTS, ASSIGNOR OF ONE-HALF TO RICHARD O. HARDING, OF BOSTON, MASSACHUSETTS.

SKATE.

SPECIFICATION forming part of Letters Patent No. 593,494, dated November 9, 1897.

Application filed January 25, 1897. Serial No. 620,527. (No model.)

To all whom it may concern:

Be it known that I, GEORGE W. PROUTY, of Medford, in the county of Middlesex and State of Massachusetts, have invented certain new and useful Improvements in Skates, of which the following, taken in connection with the accompanying drawings, is a specification.

My invention relates to skates of that class which are secured to the foot of the wearer by means of clamps which engage the edges of the heel and sole of the boot, and has for its object a construction and operation of the clamps that engage the fore-part sole edges, whereby the skate may be readily adjusted to the desired position beneath the wearer's foot whatever may be the shape of the boot-sole; and it consists in certain novel features of construction, arrangement, and combination of parts, which will be readily understood by reference to the description of the accompanying drawings and to the claims hereto appended and in which my invention is clearly pointed out.

Figure 1 is a plan of a skate embodying my invention. Fig. 2 is a side elevation of the same. Fig. 3 is an inverted sectional plan, the cutting plane being on line *xx* on Fig. 2; and Fig. 4 is a section on line *yy* on Fig. 1.

In the drawings, A is the skate-runner; B, the heel-plate, provided with the upwardly-projecting ear B' to engage the breast of the heel; and C is the fore-part foot-plate, said plates being firmly secured to the runner in a well-known manner.

D is the heel-clamping plate, provided with the ears D' to engage the rear of the heel edge and with the longitudinal slots *a a* and *b*, by means of which and the studs *c c*, firmly set in the plate B, said clamping-plate D is so mounted as to be movable longitudinally of the skate-runner to clamp the boot-heel between the ears B' and D' in a well-known manner.

The front end of the plate D has pivoted thereto at *d* the operating-lever E, in which is set, so as to be movable about its axis therein, the stud F, in a threaded transverse hole in which is fitted the rear end of the right and left threaded rod G, which is provided with the milled collar G', by which said rod may be revolved to adjust the clamps.

The forward end of the rod G is fitted to a threaded transverse hole through the stud H, to which the rear ends of the fore-part-clamping jaw-levers I and I' are pivoted in a well-known manner.

The skates now most generally in use that are secured to the foot by means of clamps that engage the edges of the wearer's boot-sole have a pair of laterally and longitudinally movable clamping-levers pivoted together at their rear ends and provided with curved slots near their front ends and loosely connected to the fore-part foot-plate by means of headed studs passing through said slots and set in fixed positions in said plate at equal distances from the skate-runner, said jaw-levers being so constructed and arranged that their clamping-ears are at equal distances from the skate-runner and move equal distances toward and from said runner, the result of which is that when the skate is secured to the foot the center longitudinal line of the skate-runner will be central between the bearing-points of said clamping-levers whatever may be the shape of the boot-sole to which it is applied. This is found to be very objectionable when the skates are worn upon right and left boots, and particularly when applied to the very crooked and pointed boots now in very general use, because it locates the skate-runner at its forward end too far toward the little toe of the wearer's foot, instead of under the great toe or between it and the second toe, which is a more desirable position. Then, again, whether a straight or crooked boot is worn, it is often desirable to locate the forward end of the skate-runner nearer the inside edge of the boot-sole than the outer edge, and as persons differ as to the best position of the skate on the foot it follows that a clamping device that does not permit of adjustment of the skate-runner laterally of the foot is objectionable. To obviate this objection, while I make the fore-part-clamping jaw-levers I and I' of the same general form and of equal lengths, form therein the curved slots *e* and *e'*, and pivot them together at their rear ends upon the stud H, so that they are moved longitudinally and laterally in a well-known manner, I make the curved slot *e* in clamp I wider than the slot *e'*

in the clamp I' and mount the clamp-guiding stud f in a slot g , formed in the foot-plate C and extending in a direction transversely of the slot e in the clamp I, so that said stud f may be adjusted to a greater or less distance from the skate-runner and firmly clamped to said foot-plate in said adjusted position, while the guiding-stud f' is set in a fixed or non-adjustable position in said foot-plate, whereby the forward end of one of the clamping jaw-levers is at all times nearer the skate-runner than the other, and the difference between said distances may be increased or diminished at will by adjusting the stud f toward one or the other end of the slot g . The stud f is provided with a head to bear upon the upper side of the foot-plate C, and under said head has a short section f^2 , that is rectangular or flat-sided to prevent said stud turning in the slot g , and the remainder of its shank is screw-threaded and has fitted thereto the nut h , having a cylindrical section h' to enter the slot e in the clamp-lever I and bear upon the foot-plate C, so as to clamp said plate between said nut and the head of the stud f without clamping the jaw-lever I, the slot e being made wider than the slot g and the cylindrical portion h' of the nut h being made of a length slightly greater than the thickness of the jaw-lever I, as shown. By this construction and application of the guiding-stud for engaging the cam-slot in one of the fore-part-clamping jaw-levers the clamping end of said jaw-lever may be readily adjusted so as to bring the skate-runner to the desired position under the wearer's foot when the skate is secured thereto.

To insure the stud H moving lengthwise of the skate in the plane of the longitudinal center line of the skate-runner, I form a curved slot i in the jaw-lever I' near its rear end, through which passes the shank of the headed stud j , which is set in a fixed position in the foot-plate C, as shown.

Both studs f and f' may be adjustably secured to the foot-plate, but, when properly adjusted, be clamped thereto in fixed positions, but at different distances from the skate-runner, so that when said jaw-levers are moved longitudinally and laterally in unison to clamp the skate to the boot the skate-runner will be located nearer the inner edge of the boot-sole than the outer edge.

The operation of my invention will be readily understood from the foregoing without further explanation here.

What I claim as new, and desire to secure by Letters Patent of the United States, is—

1. In a skate, the combination with a fore-part foot-plate secured to the skate-runner, of a pair of laterally and longitudinally movable fore-part-clamping jaw-levers pivoted together at their rear ends, and each provided with a cam-slot near its forward end; a guiding-stud passing through the cam-slot in one of said jaw-levers and firmly clamped to said foot-plate; and a guiding-stud passing

through the cam-slot in the other jaw-lever, and adjustably clamped directly to said foot-plate at a greater or less distance from the skate-runner.

2. In a skate, the combination of a pair of laterally and longitudinally movable fore-part-clamping jaw-levers pivoted together at their rear ends, and each provided with a cam-slot near its forward end; a fore-part foot-plate secured to the skate-runner and provided with a slot directly above, and extending transversely of the cam-slot in one of said clamping jaw-levers; and a guiding-stud extending through the slot in said foot-plate and the slot in said jaw-lever and firmly clamped directly to said foot-plate, normally in a fixed position, but adjustable in the slot in said foot-plate, to a greater or less distance from the skate-runner.

3. In a skate the combination of the fore-part foot-plate C secured to the skate-runner A and provided with the slot g ; the fore-part-clamping jaw-levers I and I' pivoted together at their rear ends and provided with the cam-slots e and e' respectively and the lever I' with the slot i ; the studs f' and j set in fixed positions in said foot-plate and engaging the slots e' and e respectively; and the stud f adjustably secured in the slot g in the foot-plate and projecting through the slot e in the clamping-lever I.

4. In a skate the combination of the fore-part foot-plate C provided with the slot g ; the longitudinally and laterally movable clamping jaw-lever I, provided near its forward end with the slot e ; the headed stud or bolt f provided with the flat-sided section f^2 to enter the slot g ; the nut h provided with the cylindrical section h' to enter the slot e , and bear upon the foot-plate C on each side of the slot g , whereby said stud f may be adjusted to any desired position in said slot g and be firmly clamped to said foot-plate in said adjusted position.

5. In a skate the combination of a fore-part foot-plate provided with a slot near one edge thereof; a pair of longitudinally and laterally movable fore-part-clamping jaw-levers each provided with a cam-slot near its forward end, and pivoted together at their rear ends; a guiding-stud firmly secured to said foot-plate in a fixed position and engaging the slot in one of said jaw-levers; and a second guiding-stud adjustably clamped to said foot-plate within the slot formed therein and engaging the slot in the other jaw-lever; and means for moving said jaw-lever in the direction of the length of the skate.

In testimony whereof I have signed my name to this specification, in the presence of two subscribing witnesses, on this 22d day of January, A. D. 1897.

GEORGE W. PROUTY.

Witnesses:

N. C. LOMBARD,
D. B. BEARD.