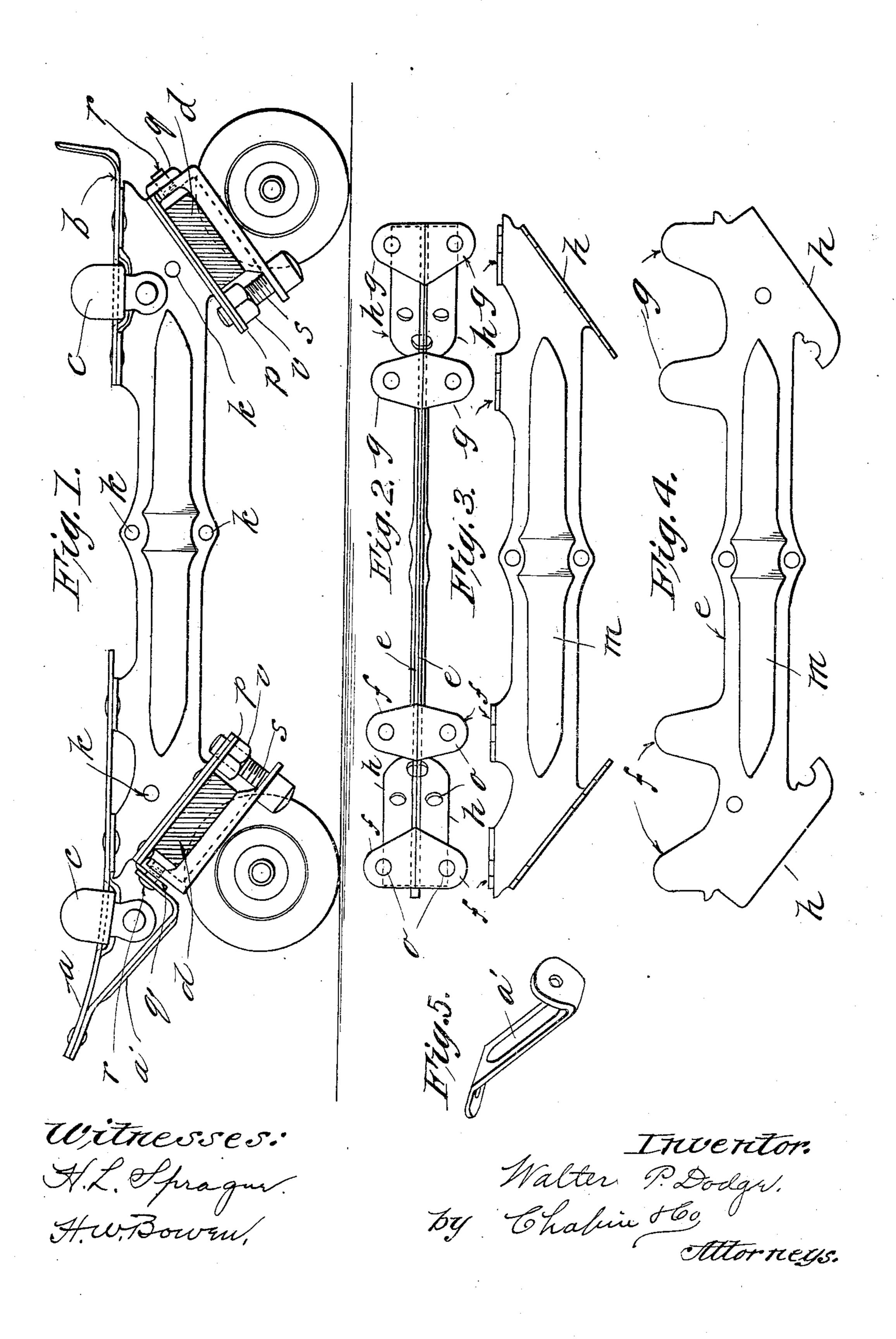
## W. P. DODGE. SKATE FRAME. APPLICATION FILED JULY 5, 1906.



## UNITED STATES PATENT OFFICE.

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## SKATE-FRAME.

No. 898,099.

Specification of Letters Patent.

Patented Sept. 8, 1908.

Application filed July 5, 1906. Serial No. 324,713.

To all whom it may concern:

Be it known that I, Walter P. Dodge, a citizen of the United States of America, residing at Springfield, in the county of Hampsden and State of Massachusetts, have invented new and useful Improvements in Skate-Frames, of which the following is a specification.

This invention relates to skates and has particular reference to the manufacture of frames for roller skates, the object of the invention being to provide a frame combining lightness, strength, and rigidity, together with means whereby the truck frames and foot and heel-plates in a roller skate may be applied to the frame whereby a stronger, neater, and cheaper frame is produced for skates than that now in general use.

consists in making a skate frame of two pieces of sheet metal which, when secured together, constitute the frame proper, portions of each piece being formed at an angle to the body thereof to constitute relatively broad bases on which the trucks, heel-plates, or sole-plates may be secured, each of the parts of the frame having preferably struck up or formed therein corrugations or ribs so disposed as to stiffen the frame and thus permit the lightening of the same materially, all as will be fully described in the following specification and clearly summarized in the claims forming a part thereof.

The invention has been illustrated as applied to a roller skate-frame, but may be adapted to an ice skate runner, and the utility thereof from a commercial point of view is greater when used in connection with the roller skate construction than in connection

In the drawing forming part of this application,—Figure 1 is a side elevation of a roller skate having a frame constructed according to this invention. Fig. 2 is a plan view of the frame alone, the foot and heel-plates and the trucks shown in Fig. 1 being omitted. Fig. 3 is a side elevation of the frame alone, as shown in Fig. 2. Fig. 4 is a plan view of the blank from which the two sides of the frame are made. Fig. 5 is a perspective view of a brace extending from the forward end of the foot-plate to a part of the truck-frame.

Referring now to these drawings, as far as the truck construction shown in Fig. 1 is concerned, it constitutes no part of the inven-

tion which resides alone in the construction of the frame. The frames are so constructed that either end may constitute the front end of the skate, both parts of the frame preferably being alike in all respects to permit the 60 quicker assemblage thereof.

Referring to the drawings, a indicates the foot-plate and b the heel-plate of a skate provided with any desired form of clamping device, as c,—d indicating the two trucks as a whole. The frame is made up of two pieces e of sheet metal, each half thereof being made from a blank such as is shown in Fig. 4, there being formed on said blank the projections f, g, and h which, when bent outwardly at right angles to the body portion, indicated by f, constitute respectively the bases for the foot-plate, the heel-plate, and the truck-frame.

When the blank shown in Fig. 4 has had 75 the projections f, g, and h bent out to the position shown in Figs. 2 and 3, the two parts e of the frame are put together and se- $\bar{c}$ ured by rivets, indicated by k. Preferably, at the time the blanks for the frame parts are 80 punched out, a longitudinally disposed rib or corrugation m is formed therein extending outwardly from the meeting faces of the two frame-parts, this rib or corrugation serving as a truss to stiffen each of the frame parts 85 in all directions; the frame, when completed, being thus provided with a tubular portion extending nearly the entire length of the body thereof. This makes it possible to use a much thinner sheet of metal from which to 90 make the blanks. Before the blanks have their projections f, g, and h bent at right angles thereto, suitable holes o in these parts are punched out to receive the rivets whereby truck-frames, sole and heel-plates are se- 95 cured together.

The securing of the sole and heel-plates to the frame serves to secure the two parts of the frame together, and the same is true of the truck-frame which, as generally constructed, comprises a plate p having a downhanging lug q at one end in which one end of the truck-frame is supported on a pivot-pin r, the opposite end being supported by a bolt s. Thus the plate p, which is secured by rivets to each of the projections h, provides still another means to secure the two parts

of the frame together.

It will be observed that the bolt s must pass through a hole which lies on the meeting 110

line of the two projections h when these have been bent around at right angles to the body of the frame, as described, and it is therefore necessary that the hole through which this 5 bolt passes must be punched out one-half in one of said projections and the other half in the opposite one, the end of the bolt however being threaded into the hole made in the solid plate p which forms part of the truck-10 frame, the usual check-nut v being applied to this bolt; as well as into the hole through the frame-part to provide as long a bearing for the bolt as possible.

To provide a support for the forward end 15 of the foot-plate (which in roller skates is liable to be bent down at the toe,) a brace  $a^1$ is applied to this part of the plate extending downward and back to the forward end of the truck-frame to which (and to the foot-

20 plate) it may be secured in any desirable way, as by rivets, the pivot-pin r serving as one of |said rivets.

What I claim, is:—

1. A frame for roller skates consisting of 25 two flat metal parts, means for uniting the same, each part having at its ends integral outwardly bent projections to serve as sup-

ports for the skate-trucks and between the ends additional integral outwardly bent projections to serve as supporting means for the 30 sole and heel-plates, as described.

2. A frame for roller skates having two sheet metal plates secured together, each plate having projections at is ends on opposite edges and bent at angles to the body por- 35 tion of the plate, the projections on one edge at the ends of each of the united plates constituting supports for the sole and heelplates, and the projections on the opposite edges at opposite ends constituting supports 40 for the trucks, said supports being arranged at equal angles to the upper edge of the frame, whereby either end of the frame may constitute the front of the skate.

3. A skate frame comprising two plates 45 secured together and having laterally extending integral projections constituting supporting elements, said integral projections being located in planes at angles to the upper sur-

face of the frame.

WALTER P. DODGE.

Witnesses:

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H. A. CHAPIN, K. I. CLEMONS.