

(No Model.)

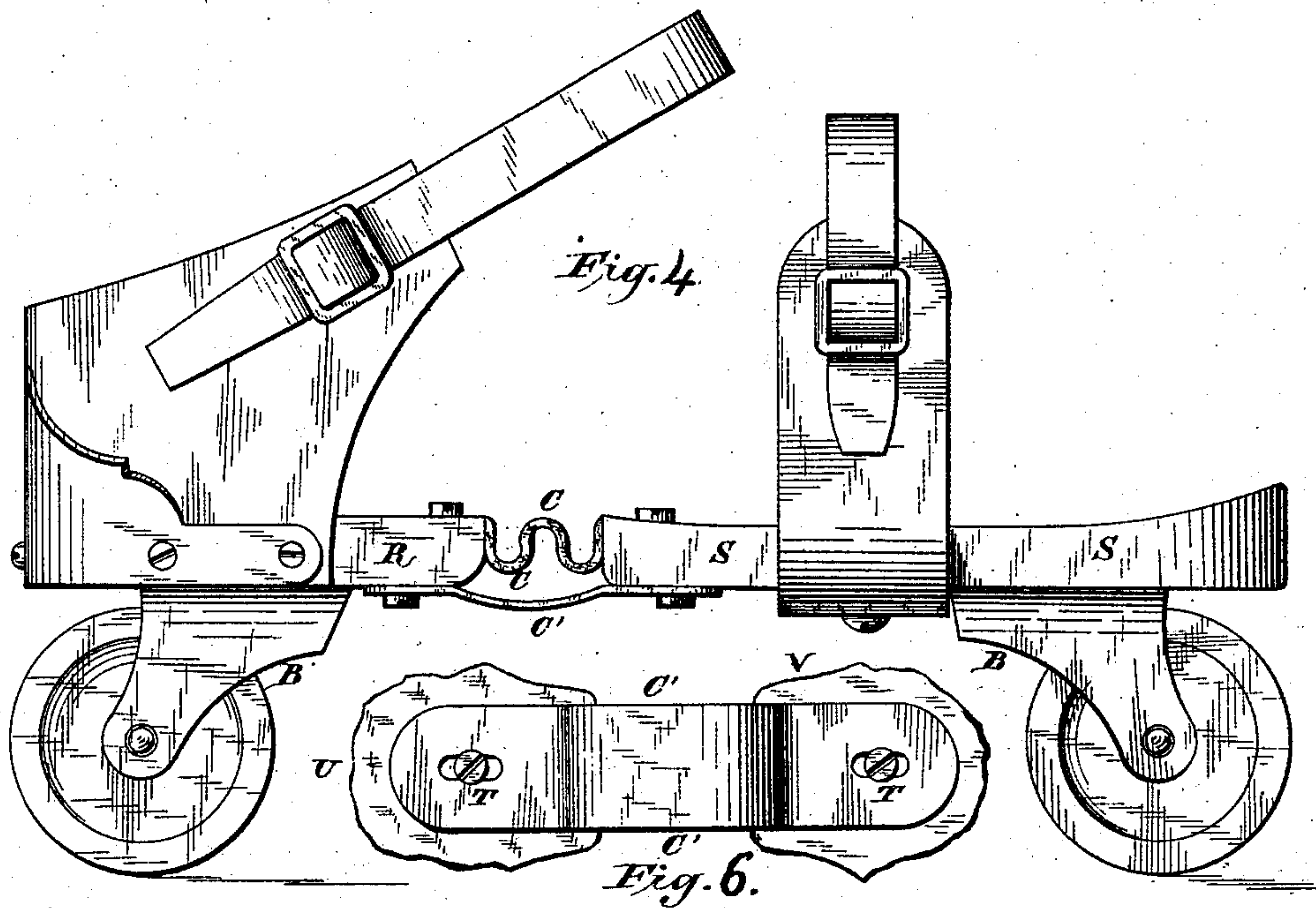
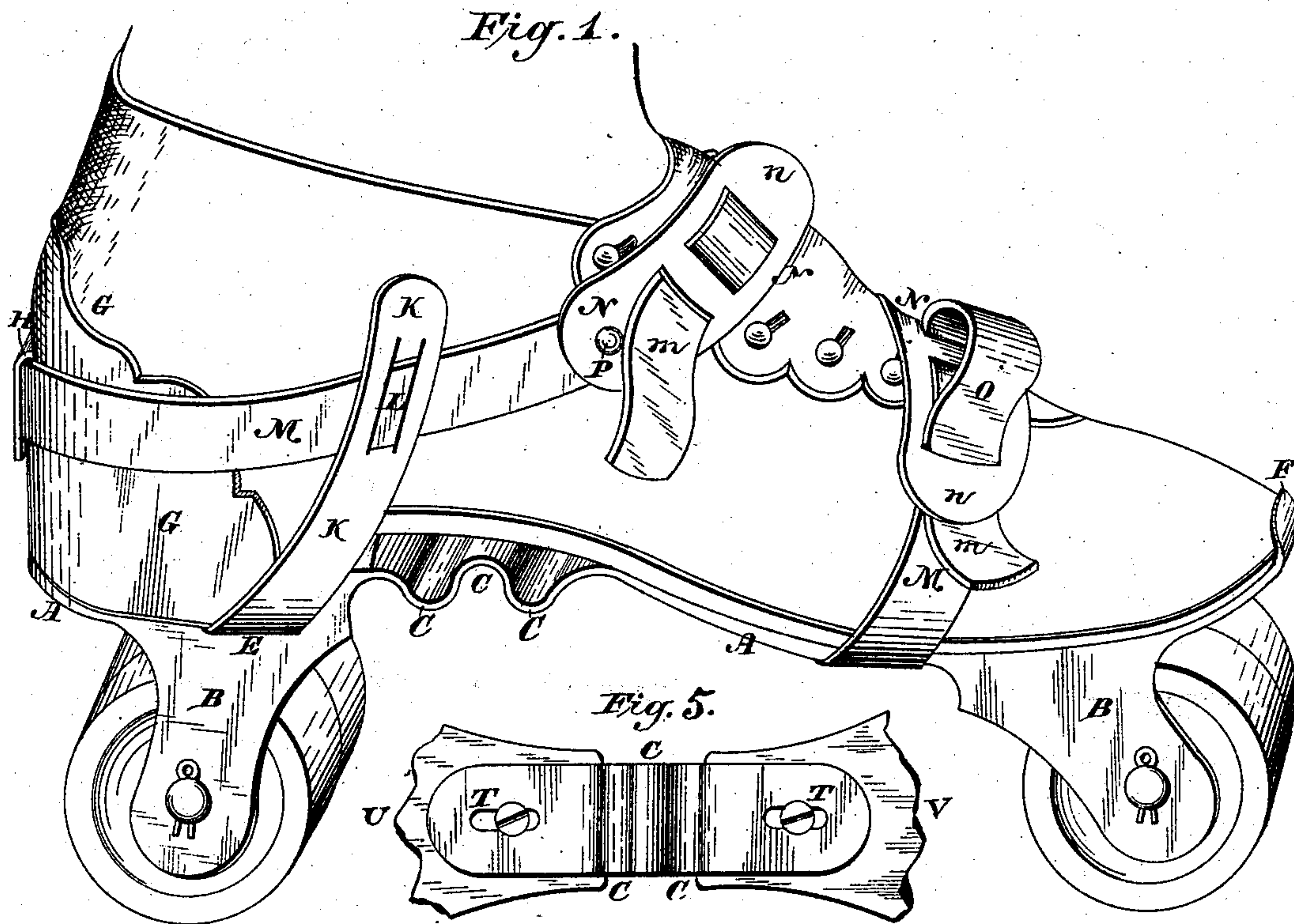
2 Sheets—Sheet 1.

J. S. GALLAHER.

ROLLER SKATE.

No. 287,820.

Patented Nov. 6, 1883.



Attest
J. S. Gallaher
Edmund Stow

Inventor.
John S. Gallaher.

(No Model.)

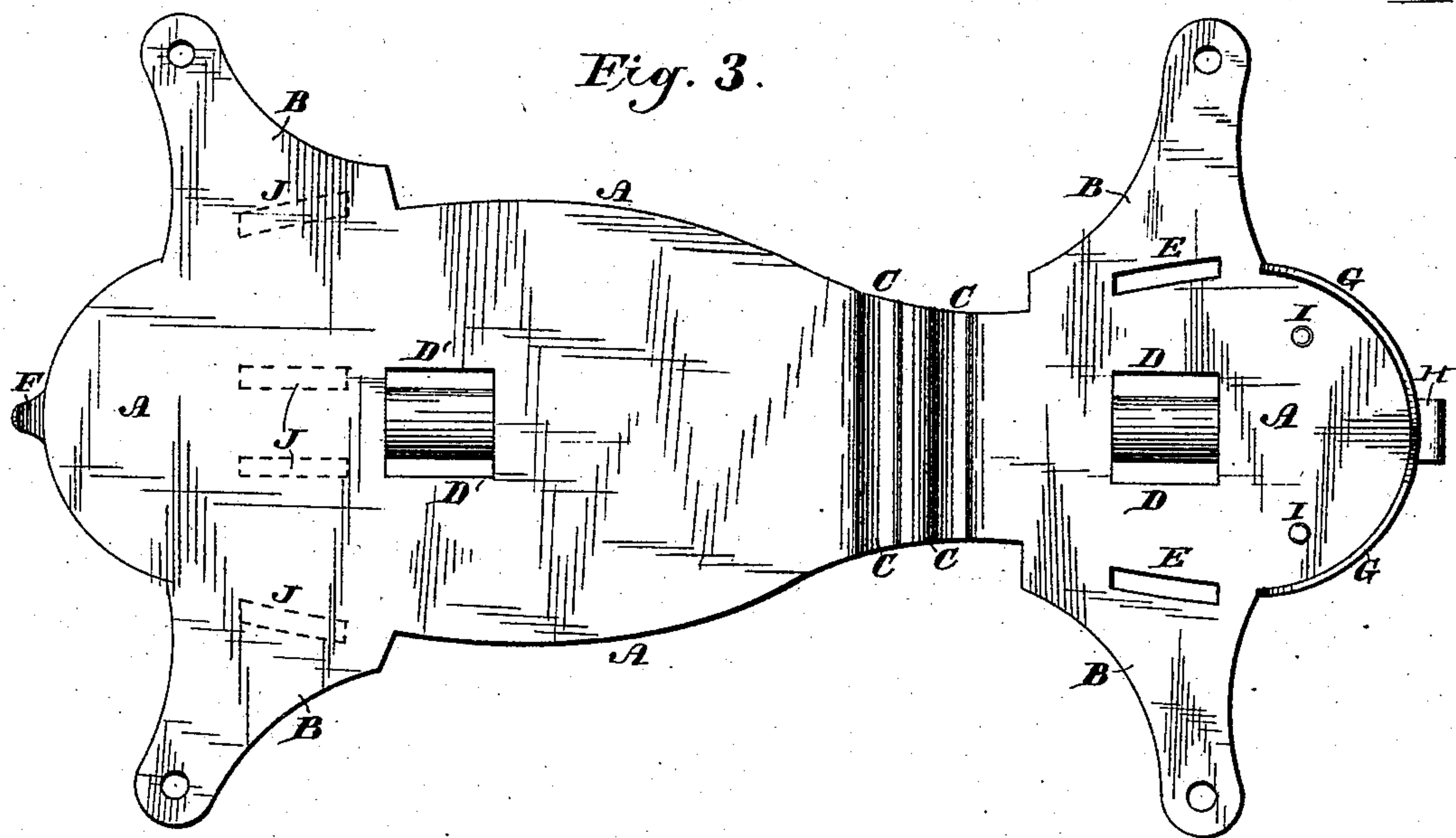
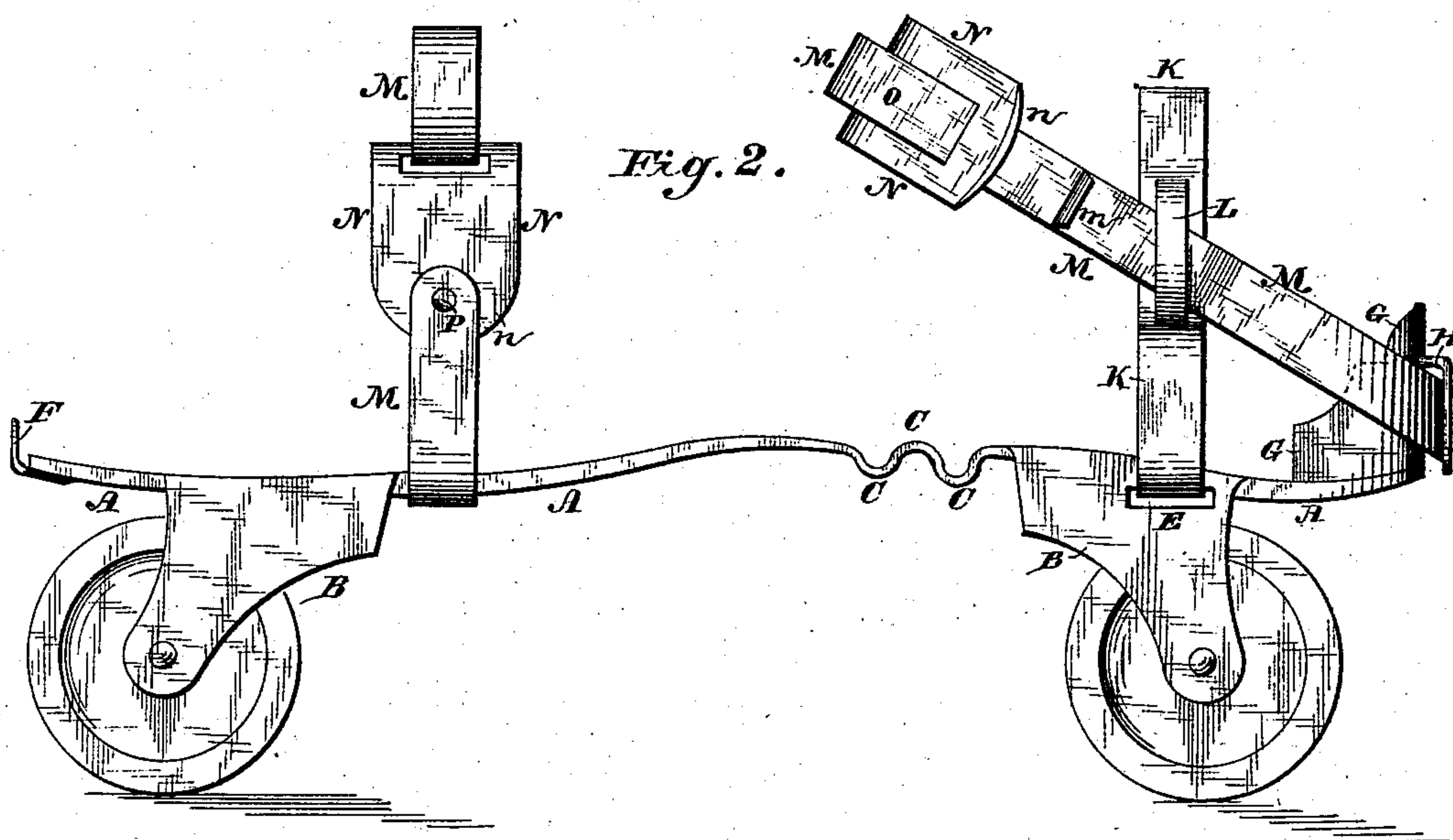
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UNITED STATES PATENT OFFICE.

JOHN S. GALLAHER, OF WASHINGTON, DISTRICT OF COLUMBIA, ASSIGNOR
TO HIMSELF AND MARY CATHARINE MILLAR, OF SAME PLACE.

ROLLER-SKATE.

SPECIFICATION forming part of Letters Patent No. 287,820, dated November 6, 1883.

Application filed June 14, 1883. (No model.)

To all whom it may concern:

Be it known that I, JOHN S. GALLAHER, a native citizen of the United States, residing at the city of Washington, in the District of Columbia, have invented and made certain new and useful Improvements in Roller or Parlor Skates, of which the following is a specification.

My improvements relate to and embrace certain special new features of simplicity of manufacture, with ready and easy adaptation to the use and purposes for which they are intended.

Figure 1 is a side view, showing in part the form of construction and the manner or mode of applying and using the improvements. Fig. 2 is a side or edge view in part of a pedal-plate or foot-rest, together with the rollers and parts of fastening-straps. Fig. 3 is a top or flat view of the individual pedal-plate or foot-rest. Fig. 4 is a vertical side view, representing an ordinary wooden "roller or parlor skate" reconstructed, and having combined therewith a corrugated and a plain flat spring. Figs. 5 and 6 represent fragmental parts of an ordinary wooden foot-rest, showing how the different forms of springs are attached to the foot-rest, made in sections, the foregoing making a part of the following description.

The object of my improvements is to so simplify the construction and manufacture of pedal-plates or feet-rests in such a manner as to do away with the stiff, rigid, solid metal or wooden feet-rests or pedal-plates in common use, and to produce a flexible springing or yielding support for the feet, so that a tensile elastic-like function, affording ease of muscular movement, is brought about in the use thereof, thereby preventing strain, stiffness, and discomfort to the ankles and feet of the wearer, together with the further object of cheapness of construction, durability, with safety in use, as well as dispensing entirely with complicated and multifarious appliances, such as screws, adjusting-rods, clamps, pins, bolts, buckles, and clasps.

More fully in explanation of my improvements, in the manufacture thereof the pedal-plate or foot-rest A A, Fig. 3, can with proper stamps and dies be cut out of suitable thin

flexible sheet or plate metal struck up and formed in the desired shape, together with the slotted ears or perforated axle-bearings B B, the pedal-plate or foot-rest also shaped or formed with series or successions of neat corrugations, flutes, grooves, crimps, or ridges C C C, said formations, Fig. 3, arranged either directly, transversely, or obliquely right and left across the plate and not parallel longitudinally, particularly not to stiffen or render the foot-rest rigid, but the reverse, and by the succession of corrugations to produce an increased surface of flexibility, and to be more tensile and yielding.

The slots or cut-outs D D E E, the spur-like toe rest or stop F, and the heel guard or brace G, formed with the hasp or staple H, all being formed at the same time on the same plate of metal, or made separate and attached in any suitable manner, as shown at I I, Fig. 3, the pedal-plate A A may be made more symmetrical, avoiding undue thickness and weight, slightly and gradually thinner, curved or arched somewhat at the transverse corrugations. If found necessary, the slots or cut-outs may be changed in location, as indicated by the series of dots at J J J; and should it be preferred to have a cast-metal pedal-plate or foot-rest, suitable patterns may be made, and the corrugated or any other suitable form of springs can be arranged in the required matrix or mold, and the molten metal cast onto the spring or springs. The flexible pedal-plate A A may also be formed with one or more longitudinal parallel slits, slots, or cut-outs, forming several or a series of plain or corrugated flexible parts. This arrangement is, however, not delineated in the drawings.

In Fig. 4 is shown how my system or mode of corrugated and plain flat springs C C C' C' are applied to the ordinary thick wooden pedal or foot-rest by merely constructing the same in two separate sections or parts, R S S, and cutting out a slight depression or countersink on the top and undersurfaces of the wooden sections, into which can be fitted the ends of the springs C C', formed with oblong compensating slots or cut-outs T T, said springs being held in place by suitable adjusting-screws, as shown in Figs. 4, 5, 6. By aid of said com-

5 compensating slots and screws the pedal-plate or foot-rest can be lengthened out or shortened, so as to fit and be adjustable to different sizes of feet, thus making an extension, compensating, and flexible yielding wooden pedal or foot-rest.

10 I am aware that metal forms, skate-frames, and feet-rests have been stamped or cut out of wrought metal, and formed with axle-bearings, longitudinal parallel rigid ribs or corrugations for stiffening or strengthening the thin metal plate, and that feet-rests for skate blades, runners, and rollers have been cast of metal and formed with axle-bearings, central open-
15 ings, and side lugs, making a rigid, unyielding foot-rest; also, that skates have been made with extension-plates and adjusting thumb-screws. I am also aware of an expired patent of 1855, in which is shown a single somewhat com-
20 pressed flat spring inverted, and a skate-blade or sliding runner, in combination with wooden sections of a foot-rest; also, another expired patent of 1866, in which is shown a single curved narrow "flexible tongue," a "toe-cap,"
25 and a "heel flange or support," in combination with pairs of metal skate blades and runners, and combined with pairs or groups of rollers. There is also a skate-heel "brace-plate" formed on its upper edge or rim with a
30 turned-down lip-piece which presses down flat and flush against the heel or ankle strap fastening, holding it firmly and permanently, thereby preventing the strap-fastening from being readily detached or slipped out, and
35 from being self-adjusting right and left, as designed and required by my open staple or hasp H, when desired. Such several enumerated devices, modes of adjustment, and combina-
40 tions of single springs, blades, runners, or rollers as therein shown and described I do not use or claim in themselves; but,

Having clearly set forth, described, and shown in detail the nature, object, and general utility and marked difference in form of construction and combination of the several me-
45 chanical functions of my improvements, what I claim and consider as new and useful, and desire to secure by Letters Patent of the United States, is—

1. A roller, parlor, or other skate constructed 50. with a pedal-plate or foot-rest, A A, stamped up or cut out or formed of wrought flexible metal, provided with lateral ears or axle-bearings B B, having slots or cut-outs D D D' D' E E for fastening-straps, formed also with a
55 series or succession of flexible corrugations, grooves, flutes, ridges, or crimps, C C C', arranged transversely or in any position across the length of the pedal-plate or foot-rest, having also a toe rest or stop, F, a heel guard or
60 brace, G G, formed with an open hasp or staple, H, all substantially as and for the purposes set forth, shown, and described.

2. In a pedal-plate or foot-rest for skates, the combination of cast sections with wrought-
65 metal springs, or formed of a series or a succession of corrugations, grooves, flutes, ridges, or crimps, C' C C, substantially as and for the purposes set forth and described.

3. In a roller or parlor skate, a wooden 70 pedal-plate or foot-rest formed in one or more sections, combined with a series or succession of flexible corrugations, grooves, flutes, ridges, or crimps, C C, and a plain flat spring, C', said springs being both provided or formed with
75 compensating oblong slots T T and adjusting-screws, substantially as set forth, shown, and described.

JOHN S. GALLAHER.

Witnesses:

B. FRANK GALLAHER,
Mrs. M. H. SENSENEY.