

(No Model.)

W. NIELSON.  
SKATE.

No. 480,610.

Patented Aug. 9, 1892.

Fig. 1.

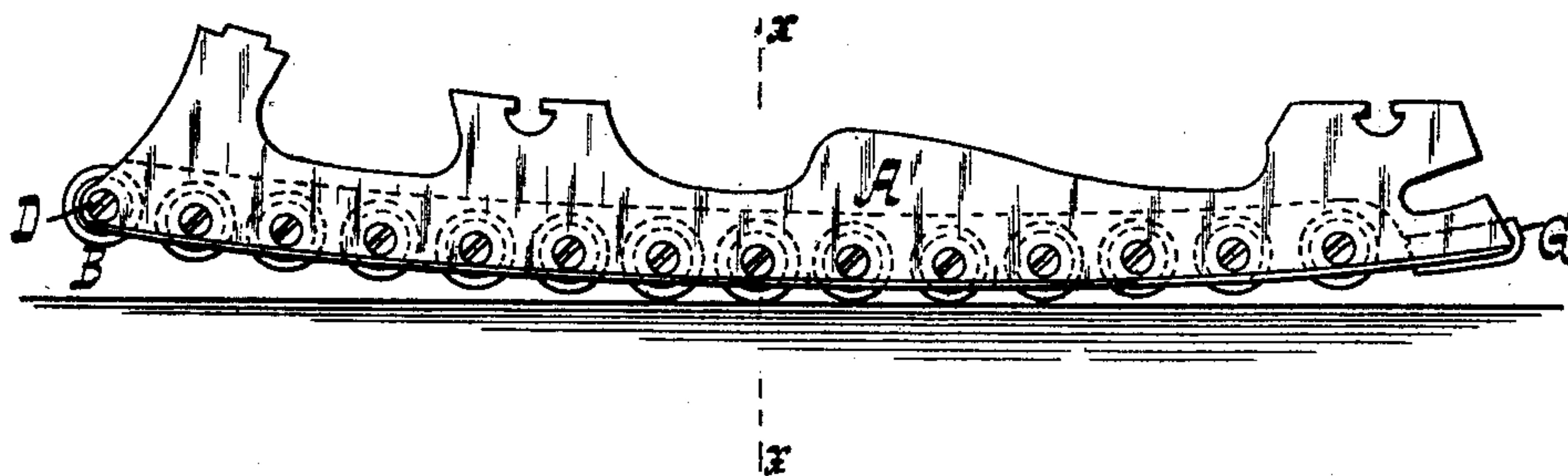


Fig. 2.

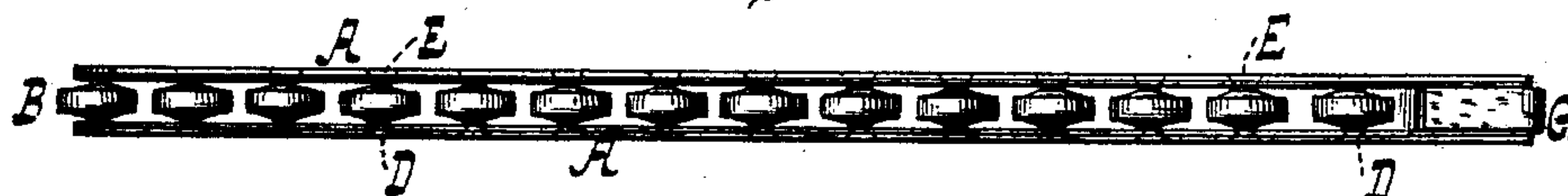


Fig. 3.

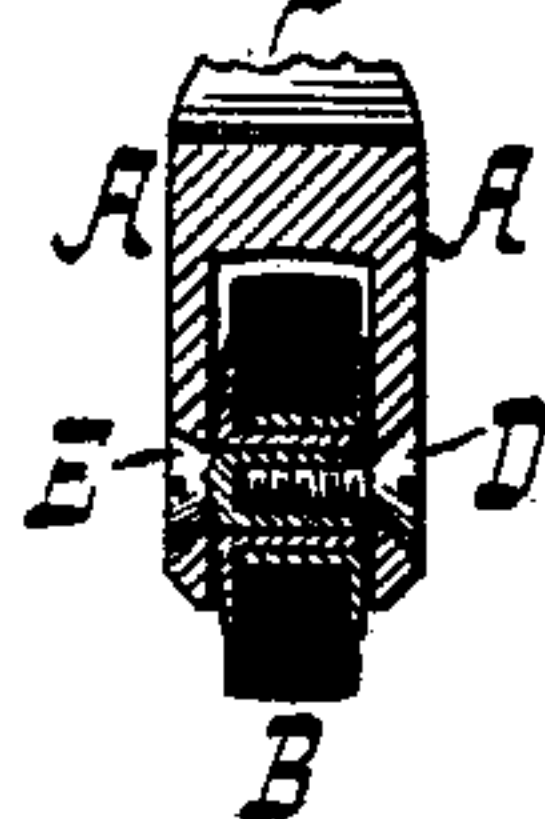


Fig. 5.

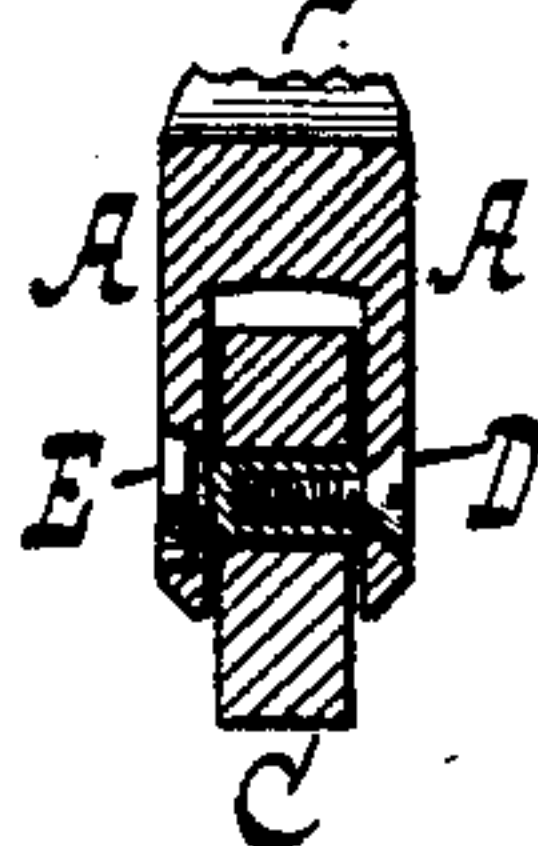
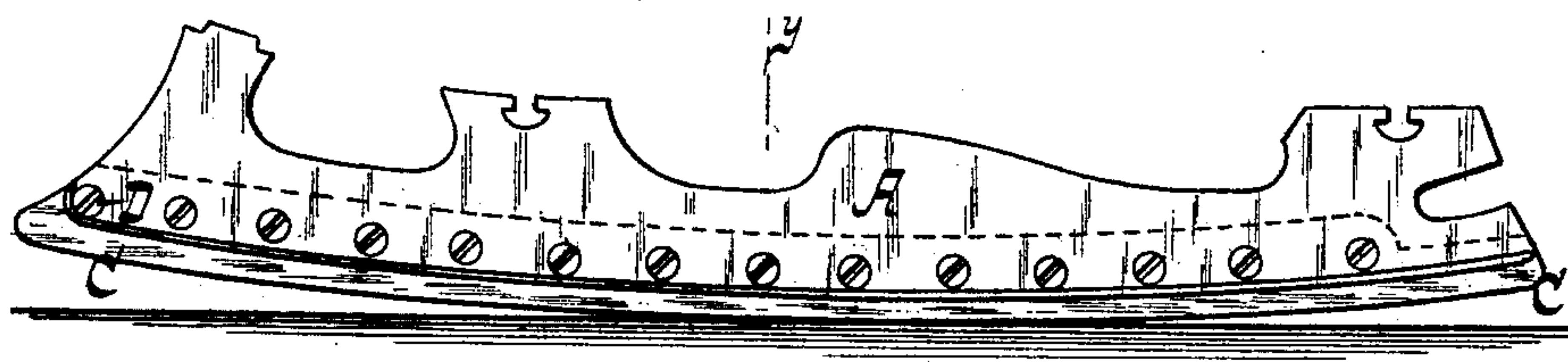


Fig. 4.



WITNESSES:

William Miller  
Edward Wolff.

INVENTOR:

Walter Nielson

BY

Van Santvoord & Haupt.  
ATTORNEYS.

# UNITED STATES PATENT OFFICE.

WALTER NIELSON, OF NEW YORK, N. Y.

## SKATE.

SPECIFICATION forming part of Letters Patent No. 480,610, dated August 9, 1892.

Application filed April 7, 1892. Serial No. 428,171. (No model.)

*To all whom it may concern:*

Be it known that I, WALTER NIELSON, a citizen of the United States, residing at New York, in the county and State of New York, have invented new and useful Improvements in a Combined Ice and Roller Skate, of which the following is a specification.

The invention relates to an improvement in skates, and by means of this invention the skate can be readily converted from a roller into an ice skate and back again, as set forth in the following specification and claims and illustrated in the accompanying drawings, in which—

Figure 1 is a side elevation of the skate with rollers. Fig. 2 is an inverted plan view of Fig. 1. Fig. 3 is an enlarged sectional view taken on the line  $x x$ , Fig. 1. Fig. 4 is a side elevation of the skate with an ice-runner. Fig. 5 is an enlarged sectional view taken on the line  $y y$ , Fig. 4.

The hanger of the skate is split or made in two parts A A. The hanger supports the foot plate or rest (not shown) in any suitable way. Between the hanger parts A A can either be inserted rollers B or a bar or runner C, as the skate is to be run on rollers or on ice. The hangers have eyes or holes for the reception of the shafts or bearings of the rollers. These shafts are each shown as consisting of a screw D, entering a tapped sleeve E. The sleeve E can either be provided with a screw-head, Fig. 3, and held against turning by a screw-driver or tool while the screw D is being screwed into the sleeve, or the sleeve may have a square or non-circular head, Fig. 5, sitting into a corresponding recess in a hanger part, so as to be kept from turning. The hanger parts A A are suitably recessed or countersunk to allow the heads of the screws D and sleeves E to sit flush with the outer faces of the hanger.

By removing the fastenings D E the rollers B can be taken away and a bar or ice-runner C inserted. This bar C has eyes or perforations for the passage of the screws or fastenings D E, so that said bar can be readily secured to the hanger to form an ice-skate.

When the skate is used as a roller-skate, a pad or filling G, Figs. 1 and 2, of rubber,

leather, or like material, should be placed or pressed into the hangers at the rear end, so that when the skater desires to stop it is only necessary to press the pad G against the floor or ground, when said pad will act as a brake.

The screw D and sleeve E form, respectively, a male and female screw and the sleeve E protects the screw-thread of screw D against friction or wear by the rotating rollers. The rollers, I have found, are advantageously made of a metallic or durable hub with a body of softer material, such as rubber or leather.

The skate is shown as a rocker-skate; but the style of skate can be varied.

What I claim as new, and desire to secure by Letters Patent, is—

1. A skate having a double hanger provided with detachable fastenings or bearings, each consisting of a screw and a sleeve, and a bar or runner secured by said fastenings, substantially as described.

2. A skate having a double hanger provided with detachable fastenings or bearings, each consisting of a screw and a sleeve, and a runner secured by said fastenings, said hangers being recessed or depressed for receiving the heads of the screws and sleeves, substantially as described.

3. A skate having a double hanger provided with eyes, detachable fastenings in said eyes, and a bar or runner having eyes or perforations corresponding to the eyes in the hanger and held in place by the fastenings, substantially as described.

4. A skate having its hanger composed of two separated parts provided with countersunk orifices, in combination with the sleeves E, having heads located in the countersinks of one hanger part, and screws D, engaging the sleeves and having heads located in the countersinks of the other hanger part, substantially as described.

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

WALTER NIELSON.

Witnesses:

W. C. HAUFF,  
E. F. KASTENHUBER.