The present invention relates to combined shoes and skates which may be termed combined shoe and interchangeable skates therefor.

The main object of my invention is to facilitate easy attachment of a skate to a shoe especially made to receive the skate.

Another object of the invention is to provide a shoe with attachment means readily co-operating with a skate especially equipped for attachment to said shoe.

As a result of this invention is to have a shoe provide with releasable attachment means adapted to receive one of several interchangeable roller and ice skates at will.

An object of the invention is also to have a shoe provided with a plate and a group of fastening elements thereon and two or more interchangeable skates each having a top plate with corresponding fastening means and additiona locking means for securing a skate to the plate upon the shoe against accidental loss therefrom.

It is, of course an important object to have a combination shoe and interchangeable skates which display a definite economy in having several skate elements to a single pair of shoes.

Other objects and advantages of my invention will appear in greater detail as the specification proceeds.

In order to facilitate clear comprehension of this invention for a proper appreciation of the salient features thereof, the invention is illustrated on the accompanying drawings forming part hereof, and in which:

FIGURE 1 is an exploded view of a skate shoe with a series of different interchangeable skates individually adapted to be attached thereto, the assembled group thus shown embodying the invention in a practical form;

FIGURE 2 is a fragmental exploded view of the rear portions of the skate shoe and a skate especially showing a lock for the two elements for preventing accidental separation of the two;

FIGURE 3 is a side elevation of an assembled shoe and skate according to the invention; and

FIGURE 4 is an enlarged fragmentary view of the rear portion of the skate shoe and skate of FIGURE 3 with portions in section to further illustrate details of the lock also appearing in FIGURE 2.

Throughout the views, the same reference numerals indicate the same or like parts and features.

In the field of sports, skating looms large in importance, both with regard to ice skating and roller skating. Skates which may be attached to shoes in general are, of course known, but the more serious skating enthusiasts prefer to have their skates permanently attached to special skate shoes, whether in connection with roller skates or ice skates, and especially in connection with the latter. This necessitates the use of a pair of shoes for each pair of skates, which is not economical, although quite practical for those who can afford such duplication of shoes. Upon considering this problem, it has occurred to me that a single pair of shoes well fitted to the feet of a skater should be equipped to engage with any type of a series of different skates in the interest of economy and convenience. As a result of such consideration, I have succeeded in producing a combination skate shoe and interchangeable skates therefor, as will now be set forth in detail in the following, due reference being had to the drawing already alluded to.

Hence, in the practice of my invention, a skater's shoe, generally indicated at 5 includes the upper 6 and sole 7 having a mounting plate 8 secured beneath the same by means of rivets 9, 9 or the like. This mounting plate is provided with a plurality of headed studs 10, 10, 10, 10, etc., depending accessibly therethrough within the marginal edges of the plate and spaced apart for proper distribution of the studs for overall effectiveness. An indoor type of skate indicated at 11 has a top plate 12 secured upon skate frame 13 and provided with a plurality of keyhole slots 15, 15, etc., corresponding to the slots 15, 10 so as to register therewith when the shoe is superposed upon skate plate 11, this skate having wheels 14, 14 upon shafts 4, 4.

Each keyhole slot is substantially round with the narrow tail portion 16 for retaining the head of a stud directed forward, which allows the studs first to drop into the slots 15 and the shoe then to be shifted forward so as to engage the studs with the tail slots 16 and thus secure the shoe to the top plate 12 of the skate.

In order to prevent the shoe from sliding backwards and thus releasing the studs from the slots, mounting plate 8 of the shoe has a depending locking lug 17 secured to sole 7 in association with this plate by nails or screws 18 engaging into the sole, this lug 21 extending down through a rear clearance slot 19 in top plate 12. The latter plate readily slips into clearance slot 19 has a screw mounting lug 17 secured a short distance rearwardly of lug 21. In order to make the lugs effective to lock the shoe in place upon skate plate 12, an adjustable locking screw is screwed or mounted in the horizontally disposed threaded hole 22 in effective position to slot against lug 21 of the shoe mounting plate 8, blocking rearward shift of the shoe along top plate 12 of the skate.

When screw 20 is released rearwardly, the shoe can be lifted off the skate and another set in place beneath the shoe.

The outdoor roller skate 33 of FIGURE 1 is similar to skate 11, and even has the same top plate 12 with its slots 15, 16 and the lug 17 at the rear to co-operate with locking screw 20 on plate 12. The skate wheels 34, 34 are, of course suited for outdoor use.

On the other hand, the ice skate 35 has the same type of top plate 12 with the same keyhole slots 15, but the skate runner 56 beneath that replaces the wheels of the roller skates. Thus, when screw 20 is released, any one of the skates 11, 33 or 35 may be mounted beneath shoe 5 with its plate 8 and the screw tightened to lock the assembly together.

Manifestly, variations may be resorted to, and parts and features may be modified or used without others within the scope of the appended claim.

Hence, in the practice of my invention, I claim:

A combined skate shoe and interchangeable roller and ice skates therefor, including the combination of a substantially flat, full length mounting plate secured beneath the sole of the shoe, a plurality of headed studs fixed upon the mounting plate in spaced apart positions and depending therefrom, a depending lug secured beneath the rear end of said mounting plate, and at least one skate having an elongated top plate matching said mounting plate having a plurality of keyhole slots with their narrow ends directed forwards and capable of registering with the headed studs in the mounting plate when the shoe is placed upon the skate and allowing the shoe to be shifted forward upon the top plate of said skate and to cause said studs to engage with said keyhole slots and retain said shoe assembled with said skate, the top plate upon the latter having a locking slot in the rear end thereof with the rear end of the slot wide to receive the lug of the mounting plate and the forward end narrow, the lug having a wide end and undercut portions above the wide end to fit the narrow forward end of the locking slot, a depending lug secured beneath the rear end
of the top plate rearwardly of the locking slot therein, and a locking screw extending forwardly through said latter depending lug and adapted to engage against the first mentioned depending lug upon said mounting plate in order to retain the same in the forward narrow portion of said locking slot.

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