(No Model.)

C. F. STEEL.

OWNERSHIP INDICATING DEVICE.

No. 588,537. Patented Aug. 17, 1897.

Fig. 1.

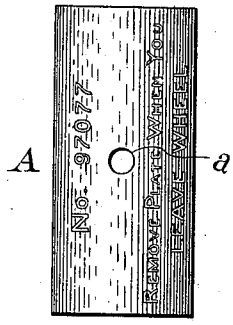


Fig. 2.

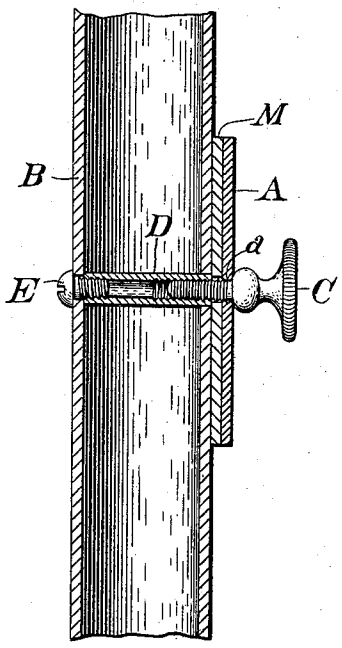


Fig. 3.

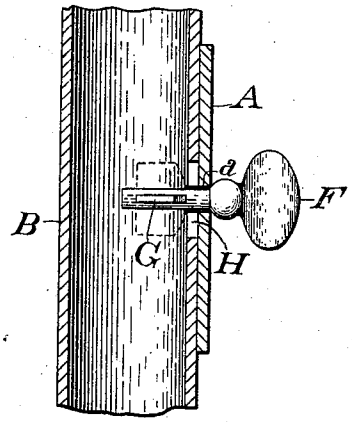


Fig. 4.

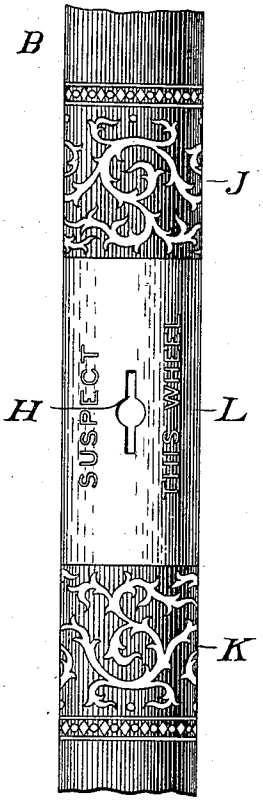


Fig. 5.

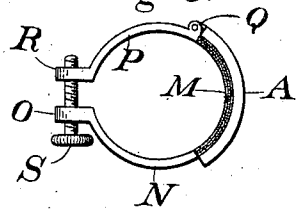
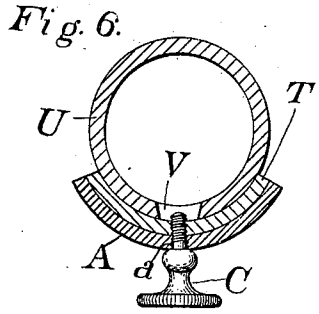


Fig. 6.



Witnesses
James S. Smith.
R. Clinton Palinger.

Inventor
Charles F. Steel,
By Edwin Guthrie,
Attorney

THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

CHARLES F. STEEL, OF PHILADELPHIA, PENNSYLVANIA, ASSIGNOR OF ONE-HALF TO DAVID JOSEPH SANDHAM, OF SAME PLACE.

OWNERSHIP-INDICATING DEVICE.

SPECIFICATION forming part of Letters Patent No. 588,537, dated August 17, 1897.

Application filed November 7, 1896. Serial No. 611,344. (No model.)

To all whom it may concern:

Be it known that I, CHARLES F. STEEL, a citizen of the United States, residing at Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented certain new and useful Improvements in Ownership-Indicating Devices; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

My invention relates to devices for indicating the presence or absence of the rightful owner of a bicycle or other article, and has for its object the production of an attachment that will enable casual observers to determine instantly whether or not a bicycle, in motion or stationary, is held in possession by its lawful proprietor.

My invention consists of a removable ownership-indicating plate suitably inscribed, a bicycle-frame or portion of any vehicle or thing prepared, customarily in a decorative manner, to contrast with and render most distinctly visible both the attached plate and the surface immediately under the plate when the latter is removed, and efficient means for fixing the plate in position.

Referring to the accompanying drawings, wherein like letters are employed to designate like parts throughout the several views, Figure 1 represents a front view of the plate element of my invention detached. Fig. 2 represents a view principally in vertical section, showing one form of constructing the parts coacting to fix the plate upon the tube. Fig. 3 represents a vertical sectional view similar to that drawn in the second figure, showing a modified form of constructing the plate-attaching elements. Fig. 4 shows a portion of a tube having the special slot fashioned to receive the modified plate-attaching elements represented in the third figure. In Fig. 4 also appear the prepared surfaces, situated above, beneath, and below the plate, of such visual character as to most clearly indicate the presence or absence of the plate. Fig. 5 represents a top plan view of the plate, the rubber or cloth lining, and one form of clamp designed for attaching plate and tube. Fig. 6 represents a top view showing in cross-section the neck of a bicycle-frame having a beveled aperture, the intermediary and outer plates also in section, and the plate-attaching screw in full.

Considering Figs. 1, 2, 3, and 5, the letter A designates the plate, having an orifice *a*, and in Figs. 2, 3, and 4 B is one tube of a bicycle-frame. Either tube of diamond frames may be chosen by the owner as the support for the plate.

In Fig. 2 plate and tube are represented as connected by means of a thumb-screw C engaging the interior threads near the end of a tube D, fixed diametrically through tube B, the latter tube being provided with orifices through which may be passed thumb-screw C, and a common machine-screw E engaging tube D at the end opposite the thumb-screw. The office of screw E is to secure the tube D in its position when the thumb-screw is removed. One end of tube D ordinarily extends to the exterior surface of tube B. (See Fig. 2.)

Fig. 3 represents a modified form of construction. In place of the thumb-screw a key F has secured near one end a cross piece or bar G. Through tube B there is provided a slot (see Fig. 4) consisting of a narrow longitudinal portion H, divided at its middle point by a circular or angular aperture corresponding in contour to the cross-section of the stem of key F. When turned into proper relative position, bar G may be passed through the slot, the key at the same time entering the aperture mentioned. It is my practice to construct the key and cross piece or bar in such manner that a turn of the former toward either side will bring the bar into contact with the interior surface of tube B and lock the plate in place. It will be understood that the stem of key F is first passed through a central orifice *a* in plate A when the parts are assembled. In the construction represented in Fig. 2 the orifice *a* is threaded and permits the passage of the thumb-screw, the threads preventing the accidental separation of plate and thumb-screw when the former is detached.

In Fig. 4, besides the form of the slot as detailed above, there appear the prepared surfaces—J upper and K lower—plain, graven, or decorated in any manner, indelibly, that will throw the plate into prominence. Usually the plate-surface is exteriorly in contrast with the remaining parts of the frame, and directly beneath the plate a corresponding area L is free from enamel, exposing a lustrous metallic surface. Between the plain metallic surface L and the two prepared surfaces J K there exists an unlike, yet equally distinctly visible, contrast to that produced by the presence of plate A between the prepared surfaces. It is clear, therefore, that the presence of the plate, while readily discernible, even though the machine be rapidly moving, could not be confounded with the appearance of the frame when the plate has been removed. It is within the scope of my invention to plate the metallic surface L in any chosen manner, and it is customary to provide the plate A interiorly with a rubber or cloth surface M, in order that the nickel or other plating of surface L may not be abraded.

Represented in Fig. 5 is a second modification of my invention constructed with the view of leaving the tube B free from orifice or slot. Suitably attached to plate A is a clamping-arm N, having a block O fixed at its free end, and through the block a threaded orifice is provided. A second and corresponding clamping-arm P is pivotally connected at the opposite edge of plate A by hinge Q, enabling the arm P to be swung open to receive the tube, as plainly to be inferred from the preceding explanation. Arm P possesses a terminal block R, also pierced by a threaded orifice, and a thumb-screw S, adapted to engage the orifices in blocks O R, completes one form of effective clamping device for fixing the locus of plate A.

Fig. 6 represents the plate A as fixed upon an intermediary plate T, which is firmly secured to the neck U of a bicycle-frame. Through the wall of the neck I form an aperture V, usually three-quarters of an inch long by one-half inch wide, beveled to make restoration impossible. I select the neck as the position of intermediary plate and aperture V for the reason that cutting away the metal in that part will not weaken the frame. Aperture V may or may not be centrally beneath the intermediary plate. Where an intermediary plate is employed, the prepared contrasting surfaces adjacent and beneath plate A are not essential, the intermediary plate when uncovered indicating the absence of the owner and acting as a warning, causing possible buyers and repairers to suspect the machine. Plate T possesses a threaded orifice, and thumb-screw C, passing through orifice *a* in plate A, as shown in the second figure, engages the threaded orifice of plate T in the ordinary manner. Any efficient mode of attaching the two plates may be employed within the scope of my invention. Should a dishonest person tear away plate T, he would be confronted with aperture V, which cannot be plugged or covered without being detected.

It is believed to have been set out herein with sufficient clearness that my invention may be applied to any movable articles—canes, umbrellas, vehicles of any description, and even articles of personal wear. Fig. 4, taken in connection with Figs. 3 and 6, may be held to represent a flat as well as a rounded surface, plate A being fashioned accordingly. It is my intention and practice also to suitably mark either plate A or surface L, or both, with the private number of maker or owner. Any secret mark could be placed upon the removable plate and upon some hidden portion of a bicycle and made a matter of record in a suitable manner and place, whereby absolute identification would necessarily result in the case of a wheel found without a plate or provided with one improperly obtained and not, in all probability, bearing the secret number or design. The uses of my invention may be thus indefinitely extended.

Briefly stated, the operation is as follows: Upon dismounting the rider removes the plate A, leaving the surface L exposed. The exposed surface may or may not be inscribed, as shown. As considerable time, cost, and labor are required to restore the prepared surfaces, the work cannot be accomplished by unskilful hands or inadequate tools and accessories. Thus the absence of plate A will cause investigation and report to the place of record.

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

1. An ownership-indicating device, consisting of a detachable plate, a base-plate adapted to support said detachable plate, and suitable clamping devices for removably connecting said plates, the surface of said base-plate being prepared for a distance approaching said detachable plate to afford a visible contrast therewith, said base being prepared beneath said detachable plate to afford a visible contrast both with said plate and with said prepared neighboring surface, substantially as described.

2. An ownership-indicating device for bicycles, consisting of a detachable plate, a bicycle-frame having a surface adapted to support said plate, and suitable clamping devices for removably connecting said plate and frame, the surface of said frame being prepared for a distance surrounding said plate to afford a visible contrast therewith, said surface being prepared beneath said plate to afford a visible contrast both with said plate and with said prepared surrounding surface, substantially as described.

3. An ownership-indicating device for bicycles, consisting of a detachable plate, a bicycle-frame adapted to support said plate, and suitable clamping devices for removably con-

necting said plate and frame, the portion of said frame lying beneath said plate being indelibly prepared to contrast with the exterior surface of said plate and frame, substantially as described.

4. An ownership-indicating device for bicycles, consisting of a detachable plate, a bicycle-frame having a tube adapted to support said plate, and a suitable clamp attached to said plate and constructed to removably connect said plate and tube, the said tube being indelibly prepared for a distance surrounding said plate to afford a visible contrast therewith, the said tube being prepared beneath said plate to contrast both with said plate and with said prepared surrounding surface, substantially as described.

5. An ownership-indicating device for bicycles, consisting of a bicycle-frame, a tube of said bicycle-frame being provided with an aperture, an intermediary plate covering said aperture and secured to said tube, a detachable plate, and suitable devices adapted to removably fix said detachable plate upon said intermediary plate, substantially as described.

6. An ownership-indicating device for bicycles, consisting of a bicycle-frame, a detachable plate formed of material affording a visible contrast with the normal finish of said frame, the portion of said frame lying beneath said plate being prepared to contrast visibly with said plate and normal finish of said frame, and suitable clamping devices constructed and arranged to removably fix said plate upon said frame, substantially as described.

7. An ownership-indicating device for bicycles, consisting of a bicycle-frame, an intermediary plate fixed to said frame, a detachable plate, suitable clamping devices constructed and arranged to fix said detachable plate upon said intermediary plate, said intermediary plate being prepared to afford a visible contrast with the normal finish of said frame, said detachable plate being formed of material affording a visible contrast with said intermediary plate and the normal finish of said frame, substantially as described.

In testimony whereof I affix my signature in presence of two witnesses.

CHAS. F. STEEL.

Witnesses:
R. S. REED,
R. W. BOODHURST.