(No Model.)

J. M. HORTON & M. M. LEVISON.

VELOCIPEDE HANDLE.

No. 421,277. Patented Feb. 11, 1890.

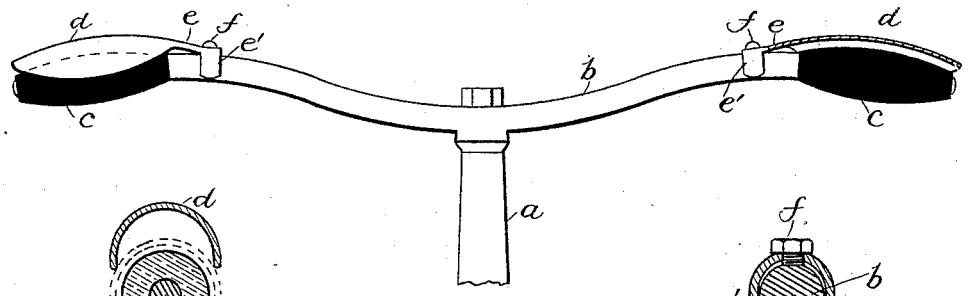

FIG. 1.

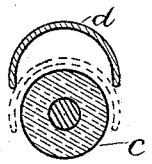

FIG. 3.

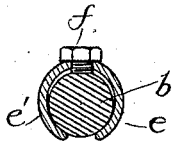

FIG. 4.

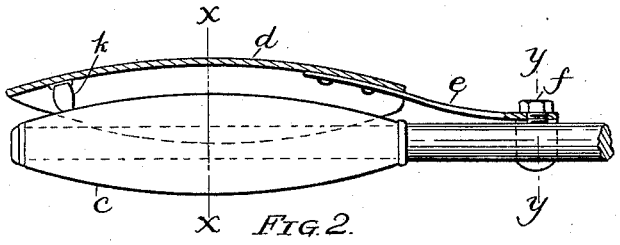

FIG. 2.

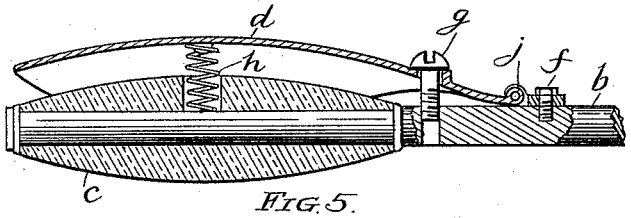

FIG. 5.

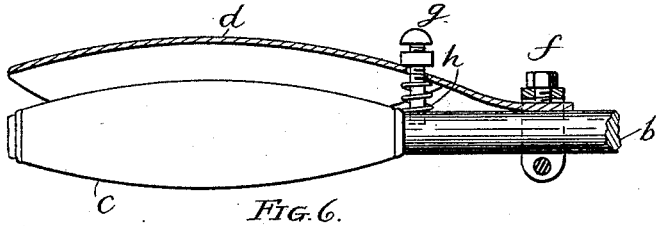

FIG. 6.

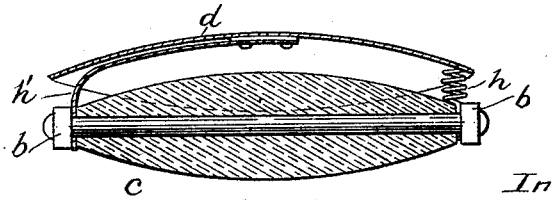

FIG. 7.

Witnesses:
J. Halpenny.
David Stavens

Inventor:
James M. Horton,
Michael M. Levison
By Bradley & Fletcher
their Attys.

UNITED STATES PATENT OFFICE.

JAMES M. HORTON AND MICHAEL M. LEVISON, OF CHICAGO, ILLINOIS.

VELOCIPEDE-HANDLE.

SPECIFICATION forming part of Letters Patent No. 421,277, dated February 11, 1890.

Application filed October 26, 1889. Serial No. 328,266. (No model.)

To all whom it may concern:

Be it known that we, JAMES M. HORTON and MICHAEL M. LEVISON, of Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Velocipede-Handles, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a front view of the cross-bar and handles of a bicycle, showing our improved handles applied thereto. Fig. 2 is an enlarged detail view, partly in section, showing one of said handles. Fig. 3 is a transverse sectional view taken upon the line *x x*, Fig. 2. Fig. 4 is a like view upon the line *y y*, Fig. 2. Fig. 5 is a longitudinal sectional view in detail of one of said handles, showing a modification of said invention. Fig. 6 is a like view showing a still further modification, and Fig. 7 shows a modified form of said invention as applied to what are commonly known as "spade-handles."

Like letters of reference in the different figures indicate corresponding parts.

The object of our invention is to so construct a bicycle-handle as to relieve the hand and arm of the rider from the constant and tiresome jar incident to the use of the ordinary rigid handle.

To this end our invention consists in the combination of elements hereinafter more particularly described and claimed.

Referring to the drawings, *a* represents the steering-post of a bicycle; *b*, the cross-bar attached thereto in the usual manner, and *c c* the usual handles made of hard rubber or other suitable material.

Above the handle *c*, and normally separated or removed somewhat therefrom, we place an oblong shield *d*, of sheet metal or other suitable material, which is made of the same or substantially the same shape as said handle and adapted to fit thereover. Preferably extending from the shield *d* over the bar *b*, to such length as may be desired, is a spring portion *e*, the end of which is attached rigidly to said bar by means of a screw *f* or other analogous device. Curved flanges *e' e'*, Figs. 1 and 4, which partially encircle the bar *b*, may be employed, when the screw *f* acts as a set-screw to tighten them. The spring portion *e* may or may not be integral with the shield *d;* but we prefer that it should be. In Fig. 2 we have shown it as a separate spring riveted to said plate or shield. It is obvious that, as the hand of the user rests upon the shield *d*, the resilient action of the spring serves to relieve the hand from being jarred and shaken, as it would be were the handle rigid; but as some riders are liable to press with greater force upon the handles than others, it is often desirable to adjust the tension of the spring. This may be accomplished by means of an adjusting-screw *g*. In Fig. 5 we have shown the screw alone for adjusting said tension, and in Fig. 6 we have shown a spiral spring *h* interposed between the shield and cross-bar and surrounding the screw *g*. In Fig. 5 a still further modification is represented, in which the shield and the part by which it is attached to the bar are in separate pieces and hinged to each other at *j*. In such a construction we prefer to place the spiral or other spring *h* beneath the middle of the shield, as clearly shown in said figure. If desired, a soft-rubber stop *k*, Fig. 2, may be employed to prevent the shield, when pressed too heavily, from striking against the handle. In Fig. 7, in addition to the spring *h*, we have shown a long flat spring *h'*, arranged beneath the shield and bent, as shown, to form an attachment with the outer end of the bar *b*. It is thus obvious that the construction of said shield and the manner of attaching the same to the handle may be varied indefinitely without departing from the essential features of our invention, and that it may be applied to the handle of any form of velocipede. We do not, therefore, confine ourselves to the exact construction.

Having thus described our invention, we claim—

1. The combination, with a velocipede-handle, of a shield shaped to conform thereto,

and a spring for connecting the same with said handle, substantially as shown and described.

2. The combination, with a velocipede-handle, of a hand-shield, a spring for connecting the same with said handle, and means, as a set-screw, for regulating the tension of said spring, substantially as shown and described.

In testimony whereof we have signed this specification, in the presence of two subscribing witnesses, this 22d day of October, 1889.

JAMES M. HORTON.
MICHAEL M. LEVISON.

Witnesses:
D. H. FLETCHER,
J. HALPENNY.