(No Model.)

E. C. STEARNS

VELOCIPEDE.

No. 526,545. Patented Sept. 25, 1894.

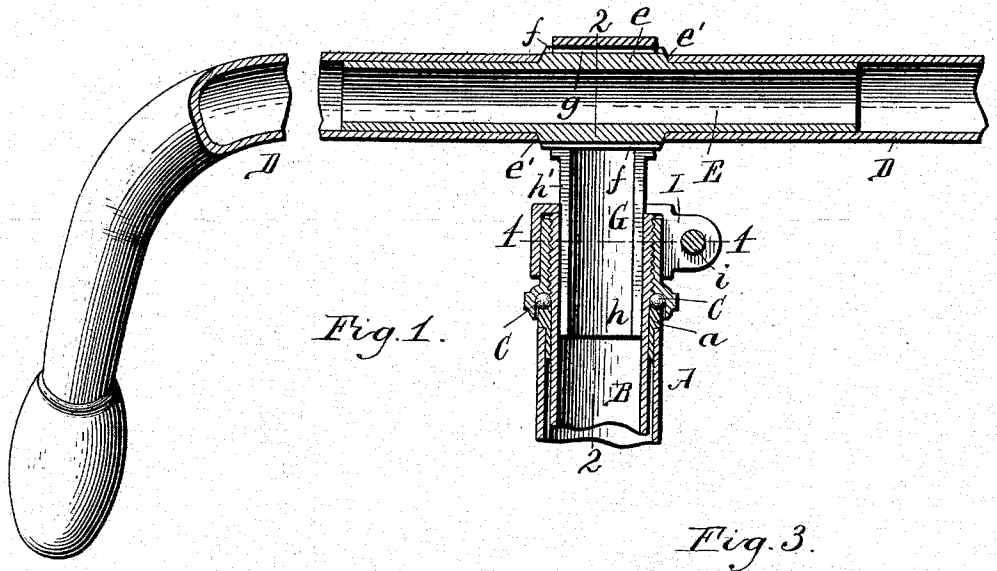


Fig. 1.

Fig. 3.

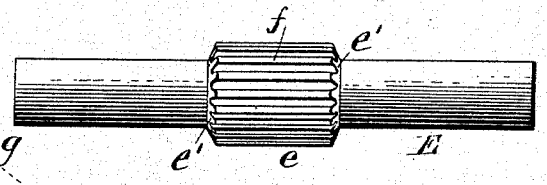
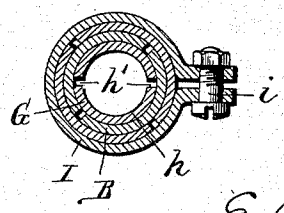


Fig. 2.

Fig. 4.



WITNESSES,

Emil Neuhart.

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E. C. Stearns INVENTOR.

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UNITED STATES PATENT OFFICE.

EDWARD C. STEARNS, OF SYRACUSE, NEW YORK, ASSIGNOR TO E. C. STEARNS & CO., OF SAME PLACE.

VELOCIPEDE.

SPECIFICATION forming part of Letters Patent No. 526,545, dated September 25, 1894.

Application filed February 12, 1894. Serial No. 499,873. (No model.)

To all whom it may concern:

Be it known that I, EDWARD C. STEARNS, a citizen of the United States, residing at Syracuse, in the county of Onondaga and State of New York, have invented a new and useful Improvement in Velocipedes, of which the following is a specification.

This invention relates to the handle bars of velocipedes and has the object to provide a simple adjustment whereby the handle bars can be readily released and turned in the socket or sleeve in which they are supported and then be secured in the desired position, thereby enabling the handles, which stand at an angle to the handle bars to be raised or lowered in a convenient manner as the rider may require.

In the accompanying drawings, Figure 1 is a fragmentary vertical section of a handle bar and steering post provided with my improvements. Fig. 2 is a vertical section in line 2—2, Fig. 1. Fig. 3 is a plan view of the coupling sleeve which connects the handle bars. Fig. 4 is a horizontal section in line 4—4, Fig. 1.

Like letters of reference refer to like parts in the several figures.

A represents the steering head provided with the lower cone *a*, B the hollow steering post arranged within the head and provided with an upper cone, and C the balls arranged between the upper and lower cones. D represents the handle bars having their outer ends, to which the handles are secured, bent or curved rearwardly, so that the handles stand substantially at right angles to the steering post. All of these parts may be of any ordinary or suitable construction.

The handle bars are preferably tubular and formed in two pieces which are connected by a coupling sleeve E inserted in the inner ends of the handle bars and secured thereto by brazing, or otherwise. The central portion *e* of the coupling sleeve is enlarged, forming shoulders *e'* against which the inner ends of the handle bars abut. The enlarged central portion of the coupling sleeve is provided with longitudinal ribs or corrugations *f* which project outwardly beyond the cylindrical surface of the handle bars so that the grooves formed between the ribs are open at their ends.

G represents a clamping sleeve or socket which is attached to the steering post and supports the handle bar. The upper portion of the clamping sleeve or sleeve proper, embraces the enlarged portion of the coupling sleeve and is provided on its inner side with longitudinal corrugations or ribs *g* which interlock with the ribs of the coupling sleeve. The lower portion of the clamping sleeve is split and the shank *h* of the sleeve is split lengthwise, as shown at *h'*, so that the shank is divided into two parts which are connected by the sleeve proper, which latter is open on its under side where it connects with the shank. Upon pressing the two parts of the shank together the clamping sleeve grips the coupling sleeve and holds the handle bars securely therein. The shank of the clamping sleeve, as a whole, is cylindrical and is adjustably arranged with its lower free end in the upper portion of the steering post, which latter and the upper cone surrounding the same are also split lengthwise.

I represents a clamping collar which surrounds the split upper cone and which has its split portions connected by a clamping bolt *i*. Upon tightening this bolt the clamping collar, upper cone, steering post and shank are contracted, which causes the clamping sleeve to grip the coupling sleeve of the handle bars.

When it is desired to change the position of the handles the clamping bolt is loosened, which allows the upper cone, steering post, shank and clamping sleeve to expand and release the coupling sleeve. The handle bars are now moved laterally until the ribs of the coupling sleeve are removed from the grooves of the clamping sleeve. The handle bars are next turned to the desired position and then moved back into the grooves of the clamping sleeve, when, upon again tightening the clamping bolt, the handle bars are held firmly in this changed position.

While I prefer to employ pronounced ribs or corrugations for interlocking the clamping sleeve with the handle bars as being most secure, this is not absolutely necessary, as merely roughened or frictional surfaces would answer the purpose in many cases. It is also obvious that the enlarged ribbed frictional cylindrical surface *e* may be formed directly

on the handle bars, without the intervention of a coupling sleeve, when the handle bars are formed in one piece.

When the collar I is loosened, the split shank can be adjusted vertically in the steering post to suit the convenience of the rider.

I claim as my invention—

The combination with the hollow steering post and the handle bar, of a split elastic clamping sleeve embracing the handle bar and provided with a split shank arranged in the hollow steering post and capable of vertical adjustment therein, and a clamping device whereby the clamping sleeve is tightened upon the handle bar and the split shank is secured in the hollow steering post, substantially as set forth.

Witness my hand this 9th day of February, 1894.

EDWARD C. STEARNS.

Witnesses:
M. ELLA SKINNER,
W. J. SPICER.