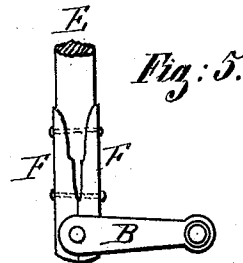
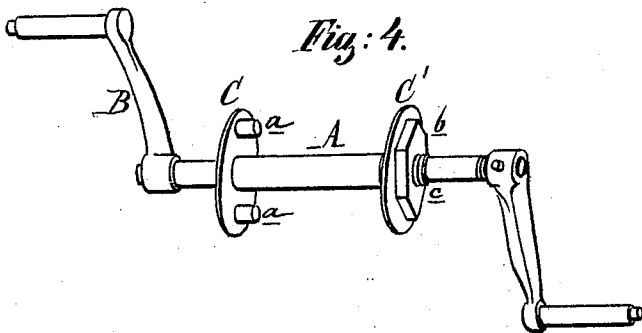
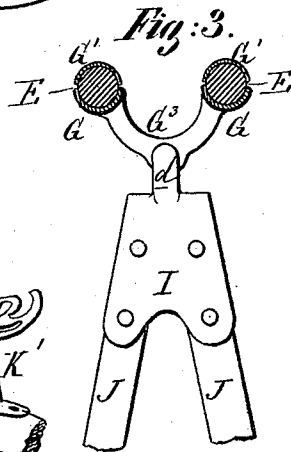
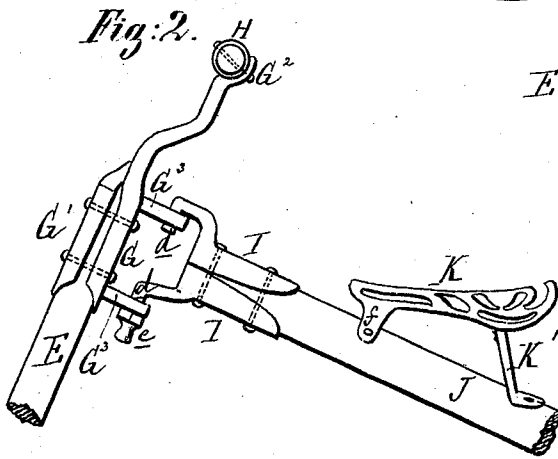
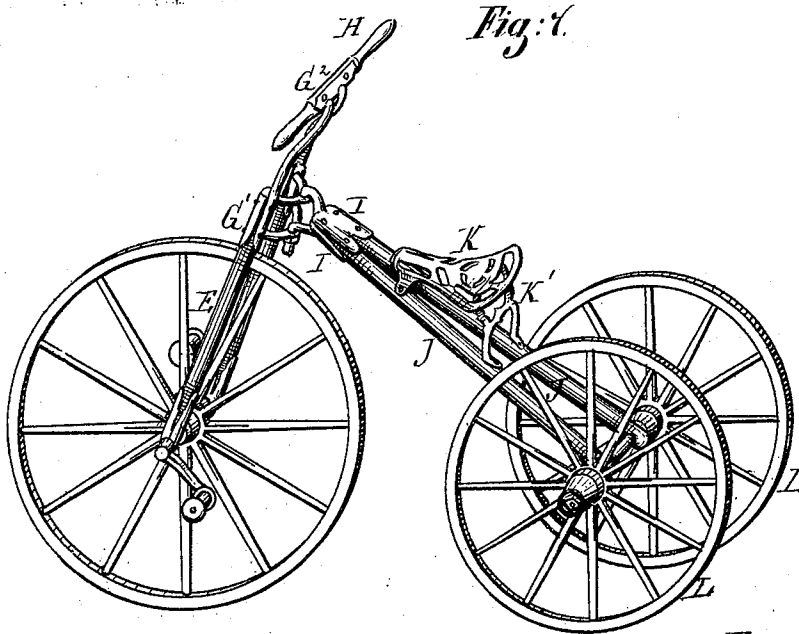


G. W. MARBLE.

VELOCIPEDE.

No. 171,623.

Patented Dec. 28, 1875.



Attest.
Edward Barthel
Thos. S. Day.

Inventor
G. W. Marble
By atty
Thos. S. Day.

UNITED STATES PATENT OFFICE.

GEORGE W. MARBLE, OF CHICAGO, ILLINOIS, ASSIGNOR OF ONE-HALF HIS RIGHT TO ADOLPH SHOENINGER, OF SAME PLACE.

IMPROVEMENT IN VELOCIPEDES.

Specification forming part of Letters Patent No. 171,623, dated December 28, 1875; application filed November 23, 1875.

To all whom it may concern:

Be it known that I, GEORGE W. MARBLE, of Chicago, in the county of Cook and State of Illinois, have invented an Improvement in Velocipedes, of which the following is a specification:

The nature of my invention relates to an improvement in velocipedes of the tricycle variety, and has for its object to construct a light, strong, and durable vehicle for boys' use, and to simplify and reduce the cost of construction.

The invention consists in the peculiar construction and combination of the various parts, as more fully hereinafter set forth, and indicated in the claims.

Figure 1 is a perspective view. Fig. 2 is a side elevation of the joint between the reach and standard. Fig. 3 is a sectional plan of the same. Fig. 4 is a perspective view of the driving-shaft, with its stationary and loose collars and cranks. Fig. 5 is a side elevation of a driving-box at the foot of one standard, and of a pedal-crank.

In the drawing, A represents the forward or driving axle, having cast in one piece with it one pedal-crank, B, and a stationary collar, C, having two studs, *a a*, to enter one end of the hub of the wheel D, which is clamped firmly on the axle by a loose screw-threaded collar, C', at the other end, forced up by a nut, *b*, run on a screw-thread, *c*, cut on the axle.

The bifurcated standard is composed of two rods, E, of turned hard wood, whose lower ends are received in a socket composed of two semi-cylindric plates, F, having one-half of the axle-journal box formed in the lower end of each. The axle is journaled in the boxes so formed at the lower ends of the standard-rods.

The tops of said rods are received in two socket-plates, G G¹, the former of which is cast with a rod curved upward and backward, and terminates in a horizontal socket-plate, G², which connects the two, and also receives a turned wooden tiller, H, secured thereto by two bolts or rivets. The ends of the standard-rods are also secured in their respective sockets by bolts or rivets, as shown.

The socket-plates G G are further connected together by two cross-girts, G³, cast with them

in one piece, with a hole drilled through the middle of each girt to receive a pintle-hook, *d*, cast on the fore ends of two socket-plates, I, so shaped as to receive the front ends of two turned wood reach-rods, J J, through whose rear ends the rear axle passes, having mounted on it the hind wheels L L.

The lower hook *d* is prevented from coming out of its hole by a nut, *e*, and the double hook-joint forms a very strong but easy-working coupling.

K is a metallic saddle-shaped seat, having two short legs, *f*, under the front corners, which rest upon and are riveted to the reach-rods. The rear end of the seat is supported by a metallic frame, K', riveted to its under side, and has its corner legs riveted to the reach-rods. By bending the legs the same seat can be fitted to velocipedes of various sizes.

It will be noticed that all the wooden parts are turned in the lathe, and that the socket-plates afford a sure and strong fastening, without mortising or tenoning any portion of the work.

What I claim as my invention is—

1. In a velocipede, substantially as described, the axle A, crank B, and collar C, cast in one piece, and the combination therewith of the loose collar C' and nut *b*, as and for the purpose set forth.

2. The castings G, G¹, G², and G³, forming a connection for the top of the standard, the tiller, and a means for coupling the reach, substantially as set forth.

3. The combination of the socket-plates I I, adapted to inclose and hold firmly together the ends of the reach-rods, the hooks *d d* on such plates, and the castings G G¹ G³, forming a connection between the reach-rods and the standard, all constructed and arranged substantially as described and shown.

4. A velocipede of the class described, having the reach and standard constructed of round rods, joined together by metallic plates, substantially as described and shown.

GEORGE W. MARBLE.

Witnesses:

WM. H. LOTZ,

WM. G. HOFFMANN.