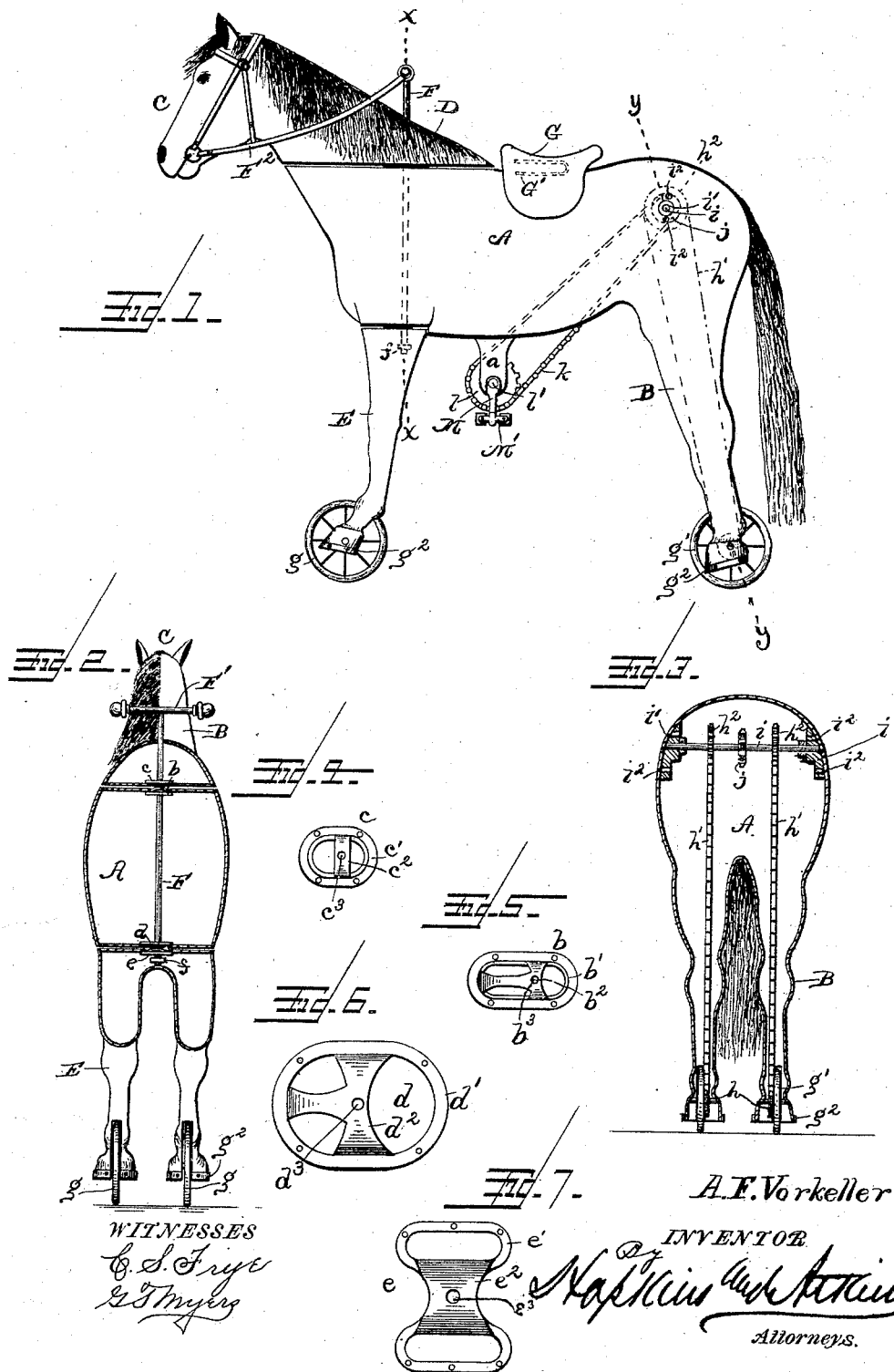


(No Model.)

A. F. VORKELLER.  
VELOCIPEDE.

No. 489,840.

Patented Jan. 10, 1893.



WITNESSES  
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# UNITED STATES PATENT OFFICE.

AUGUST F. VORKELLER, OF CHICAGO, ILLINOIS.

## VELOCIPEDÉ.

SPECIFICATION forming part of Letters Patent No. 489,840, dated January 10, 1893.

Application filed June 9, 1892. Serial No. 436,166. (No model.)

*To all whom it may concern:*

Be it known that I, AUGUST F. VORKELLER, of Chicago, county of Cook, State of Illinois, have invented certain new and useful Improvements in Velocipedes, of which the following is a specification, reference being had to the accompanying drawings.

My invention relates to certain new and useful improvements in velocipedes.

The object of the invention is mainly, to conceal the motive power gearing of a velocipede having its body constructed in imitation of an animal, preferably a horse or pony, and further to provide a simple, cheap and durable carrying frame of the character named, and to the accomplishment of the above the invention consists of certain novel parts and in certain novel combinations of parts as will be fully set forth and claimed, reference being had to the accompanying drawings, in which:

Figure 1, is a side elevation of the machine complete, parts being shown in dotted lines: Fig. 2, a section on, line  $x-x$  of Fig. 1, Fig. 3, a section in line  $y-y$  Fig. 1, and: Figs. 4, 5, 6 and 7, views in detail of parts employed.

Like letters refer to like parts in the several views:

In the drawings the body A, and the rear legs B, of the machine (the machine being formed like a pony) are formed from a single sheet of metal pressed to the desired form to represent a pony, the body part A, being formed in its lower edges about midway between the front and rear ends with downwardly projecting hanger arms  $a$ , to be referred to hereinafter. At the forward end of the body part and adjacent to the upper edges thereof, a plate  $b$ , shown in Fig. 5, is secured, such plate being situated between the sides of the body and held in place by means of suitable rivets passed through the depending flange  $b'$ , with which the plate is formed, the said plate being preferably cut away as shown to facilitate the riveting and to lighten the plate. Through an arm  $b^2$ , formed by thus cutting away the plate there is formed an aperture  $b^3$ , to be referred to hereinafter.

The head C, and neck D, of the figure are formed from another sheet of metal, there being a plate  $c$ , (Fig. 4) secured in the lower end of the neck, this plate provided with an upturned flange  $c'$ , through which the rivets

are passed to secure it to the neck plate  $c$ , is also cut away and through an arm  $c^2$ , thus formed there is made an aperture  $c^3$ , similar to aperture  $b^3$ , of plate  $b$ , the two arranged to register when the neck is placed in position on the body, as will be described.

To the bottom of the body frame, adjacent to its forward end there is secured a plate  $d$ , (Fig. 6) secured to the body by rivets passed through an upturned flange  $d'$ , this plate being also cut away forming an arm  $d^2$ , through which an aperture  $d^3$ , is made, such aperture, when the plate is in position, being in the same vertical plane as apertures  $b^3$ , and  $c^3$ , of plates  $b$ , and  $c$ .

The front legs E, of the figure are made from a single strip of sheet metal pressed to the desired form, and secured to the upper ends thereof, is a plate  $e$  (Fig. 7) which plate is secured to the form by means of rivets passed through a depending flange  $e'$ , this plate being also cut away and provided with a solid portion or arm  $e^2$ , through which an aperture  $e^3$ , is formed, this aperture when the plate is in position being in the same vertical plane as the apertures of the other plates named.

To connect the several parts named, the neck and head piece is placed upon the body part so that the plate  $c$ , will rest upon plate  $b$ , and the leg part inserted beneath the body part so that plate  $d$ , will rest upon plate  $e$ , the several apertures of these registering to receive a vertical rod F, which is passed through the several parts, a head or nut  $f$ , preventing the rod from being displaced, such rod extending up a suitable distance above and serving to pivotally connect the head and front legs to the body. Upon the upper end of rod F, there is mounted a cross bar  $F'$ , which serves as a handle by means of which the head and front legs of the figure may be turned and the machine guided.  $F^2$ , represents suitable lines connected with rings secured to the side of the head and attached to the handle, but serving no particular purpose other than to carry out the general effect sought to be produced in the representation of a horse.

G, is a seat mounted upon a spring  $G'$ , secured to the back of the figure, such spring consisting of a leaf spring secured to the

back of the figure and after being bent back upon itself, secured to the under side of the seat.

The lower extremity of each leg E, and B, 5 is formed to imitate the hoof of a horse, and in the enlargements thus formed wheels  $g, g'$ , are mounted, the axles of such wheels having bearings in the side walls of the hoofs which are strengthened at such points by having 10 plates  $g^2$ , riveted to them. The hub of each wheel  $g'$ , carries a series of sprocket teeth  $h$ , around each of which an endless chain  $h'$ , is passed, such chains being also passed around sprocket wheels  $h^2$ , mounted upon a shaft  $i$ , 15 which has bearings in the upper rear end or rump of the figure the ends of the shaft resting in sockets  $i'$  removably secured to the sides of the figure by means of screws  $i^2$  or otherwise. Mounted upon the same shaft  $i$ , 20 at a point intermediate of the two wheels  $h^2$ , is a sprocket wheel  $j$ , around which an endless chain  $k$ , is passed, such chain also passing around a sprocket wheel  $l$ , mounted on a shaft  $l'$ , which has bearings in hanger arms 25  $a$ , hereinbefore referred to. This shaft protrudes at both ends through such hanger arms such ends being formed into crank arms M, to which suitable treadle plates  $M'$ , are secured, the position of such parts being similar to that of the stirrups of a riding saddle. 30 By the arrangement of parts as described

it will be seen that any one occupying the seat and operating the treadles M, will impart motion to sprocket wheel  $l$ , and through the medium of the line of gearing described to 35 the wheels located in the hoofs of the rear legs, whereby the machine will be propelled forward or backward as the case may be, and it will be further observed that by manipulating the handle  $F'$ , the machine may be 40 guided.

Having thus described my invention what I claim is:

The combination, with a velocipede having its frame or body constructed in the form of 45 an animal, of a pedal shaft journaled in bearings under the belly of the figure, a shaft journaled in removable bearings in the rump thereof, said shaft being provided with sprocket wheels, the driving wheels journaled 50 in the rear hoofs of the figure and provided with sprocket wheels, and the connecting sprocket chains concealed in the rear legs and partly in the body of the figure, substantially as specified. 55

In testimony of all which I have hereunto subscribed my name.

AUGUST F. VORKELLER.

Witnesses:

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