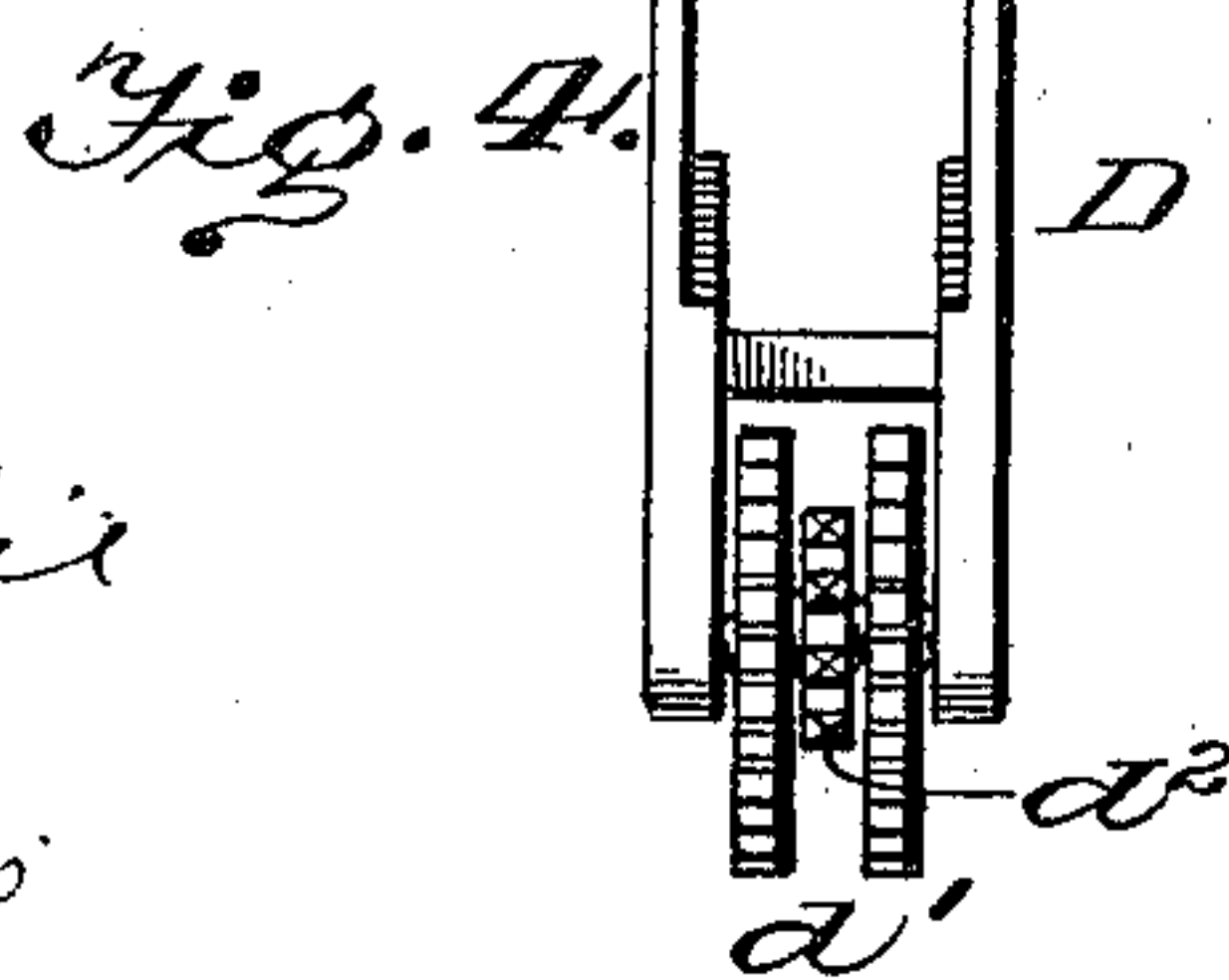
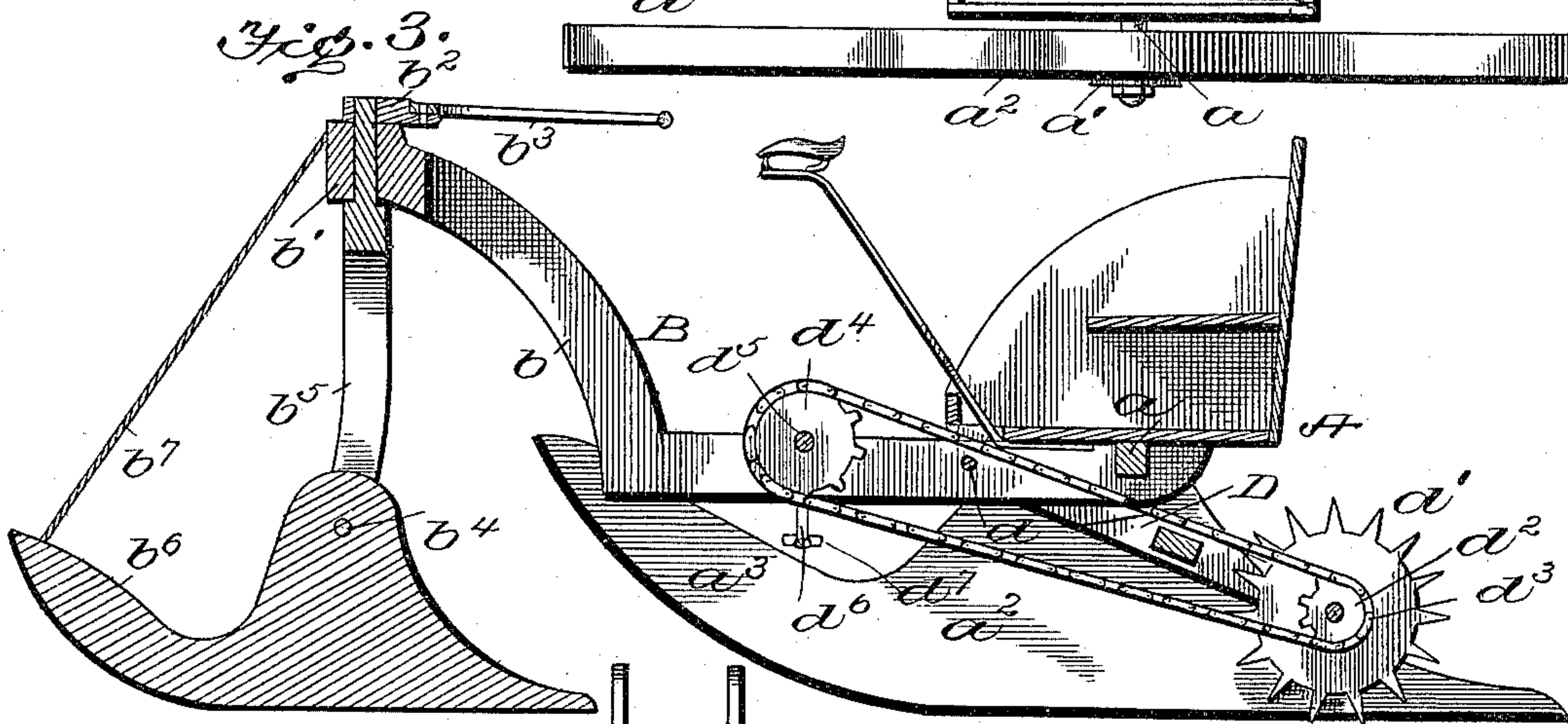
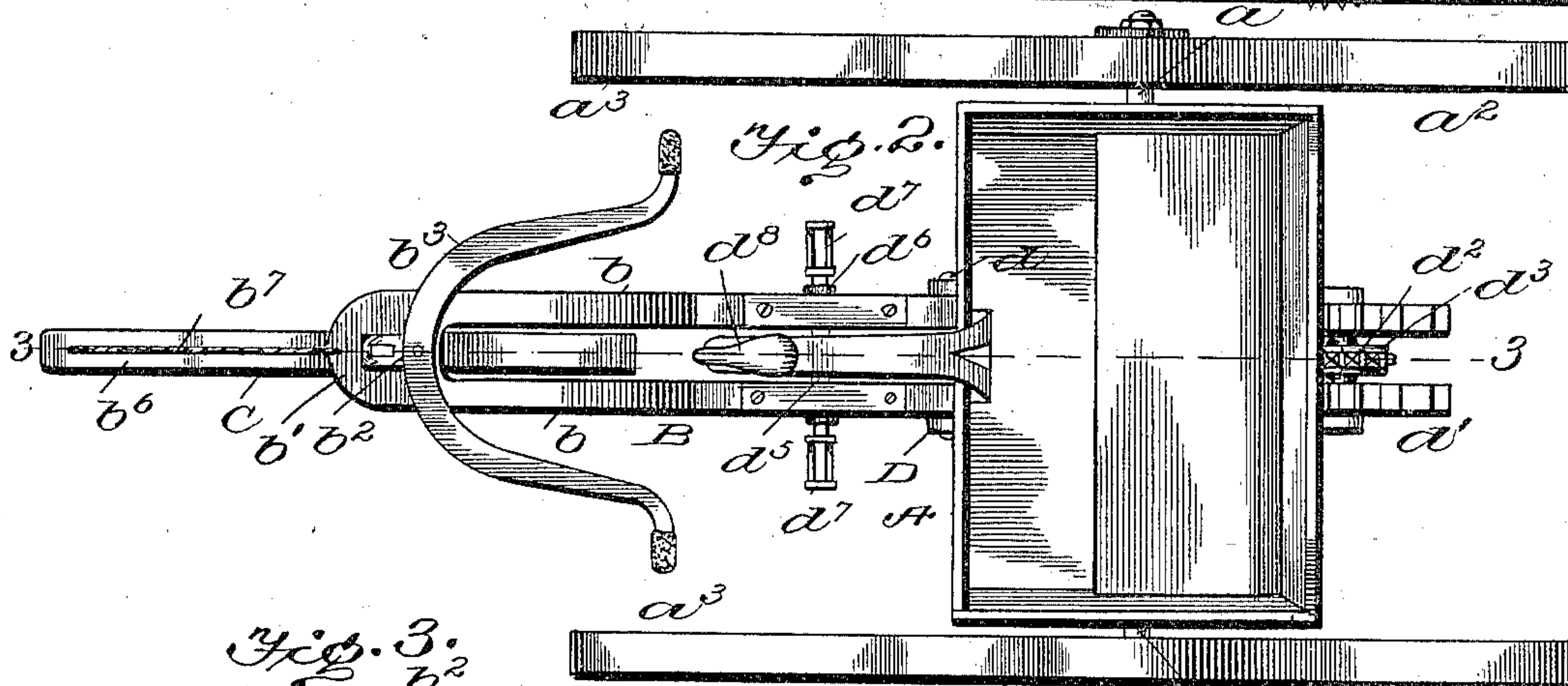
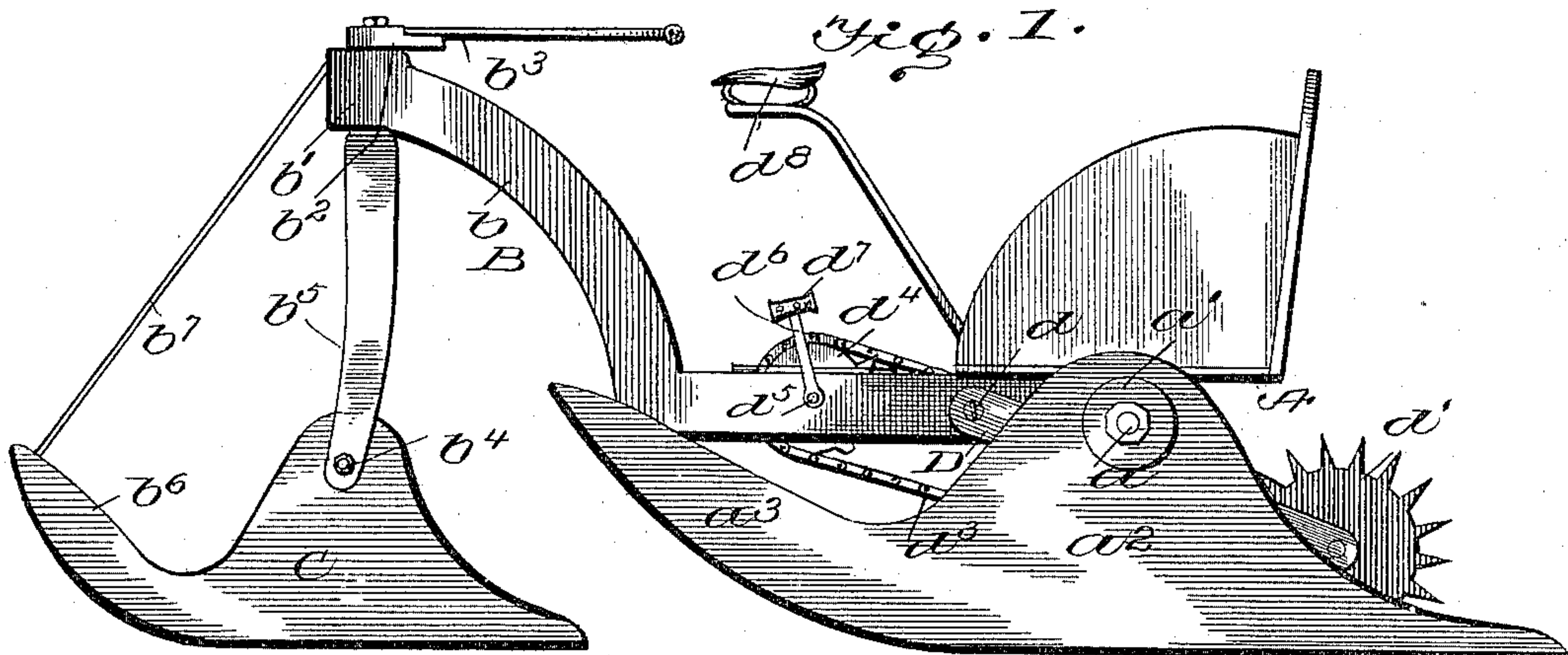


(No Model.)

E. BEAUDIN.
ICE VELOCIPED.

No. 598,760.

Patented Feb. 8, 1898.



Witnesses:
John D. Smith
Walter Williams

Inventor
Elie Beaudin
by *J. Fred. Reilly*
Attorney.

UNITED STATES PATENT OFFICE.

ELIE BEAUDIN, OF RHINELANDER, WISCONSIN, ASSIGNOR OF ONE-HALF TO
A. B. BAKER, OF SAME PLACE.

ICE-VELOCIPED.

SPECIFICATION forming part of Letters Patent No. 598,760, dated February 8, 1898.

Application filed March 24, 1897. Serial No. 629,085. (No model.)

To all whom it may concern:

Be it known that I, ELIE BEAUDIN, a citizen of the United States, residing at Rhinelander, in the county of Oneida and State of Wisconsin, have invented certain new and useful Improvements in Bicycle-Sleighs; 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.

This invention contemplates certain new and useful improvements in ice-velocipedes and the like.

The invention has for its object the production of a velocipede of this character which can be readily and easily propelled and in which the runners are so arranged that they may conform to any unevenness or inequality caused by hummocks of ice or snow-drifts or the like.

In carrying out my invention I mount a vehicle-body upon suitable side runners, which are pivotally mounted upon axles in such manner that they may have a rocking movement, and to said body is pivoted a front fork in which an additional or front runner is also pivotally mounted, a suitable handle-bar for guiding the vehicle being connected to said fork. Between the parallel side bars forming the forward portion of the vehicle-body is mounted a crank-shaft designed to be operated by suitable pedals, said crank-shaft having a sprocket-wheel keyed thereon, which is connected by a chain to a second sprocket-wheel mounted between the bars of a pivoted depending fork, said second sprocket being formed integral with spur-wheels designed to engage the surface of the ice or the like and propel the vehicle forward as the crank-shaft is rotated. A suitable saddle is arranged above said crank-shaft.

The invention will be hereinafter fully set forth, and particularly pointed out in the claims.

In the accompanying drawings, Figure 1 is a view in side elevation, illustrating my improved ice-velocipede. Fig. 2 is a top plan

view thereof. Fig. 3 is a longitudinal sectional view on line 3 3 of Fig. 2. Fig. 4 is a detail.

Referring to the drawings, A designates the body portion or box-frame of my improved ice-velocipede, the same presenting a seat and having an axle *a* secured thereto, on the ends of which are pivotally mounted the hubs *a'* of the side runners *a*², said runners being provided with forward upturned portions *a*³ to enable the same to readily pass over obstructions. Extending forwardly from the body portion or seat-frame A is a frame B, composed of two parallel bars *b*, which are secured at their rear ends to the vehicle-body, the forward ends thereof being united by a web or enlargement *b'* to form a head for the steering-post *b*², an operating-handle *b*³ being secured to the latter and extending rearward therefrom. A front runner C is pivotally mounted at *b*⁴ between the members of a fork *b*⁵, formed with said steering-post, said runner having its forward end upturned, as at *b*⁶, the pivotal movement of said runner being limited by a cord or chain *b*⁷, connecting the upturned portion thereof to the web or enlargement *b'*.

D is a depending frame or fork pivoted at *d* to frame B, near the rear end thereof and beneath the vehicle-body A, in such manner that the spur-wheels *d'*, which are pivotally mounted therein, will always contact with the surface of the ice or the like over which the velocipede may be propelled. Between wheels *d'* and keyed on the same shaft therewith is a sprocket-wheel *d*², which is connected by a sprocket-chain *d*³ to a sprocket-wheel *d*⁴, keyed on a shaft *d*⁵, mounted between the bars *b*, said shaft being adapted to be rotated by crank-arms *d*⁶, carrying suitable pedals *d*⁷. A saddle *d*⁸, mounted on a suitable supporting-post, is located above said shaft.

The advantages of my improved ice-velocipede are at once apparent. It will be particularly observed that the fork carrying the spur-wheels is always in contact with the surface upon which the vehicle is resting, and that by pivoting the runners the vehicle may be made to conform to any unevenness of such surface, whether caused by snow-drifts,

ice hummocks, or the like. It will also be noted that by forming the runners with upturned portions they can be made to readily and easily pass over obstructions without interfering with the progress of the machine.

I claim as my invention—

1. The herein-described improved ice-velocipede, comprising a body portion or box-frame having a seat and provided with a front extension rigidly secured thereto, runners pivotally connected to said body portion, a steering-head formed on said front extension, a steering-post mounted in said head, a runner pivoted to the lower end of the latter, a depending frame pivotally connected to said body portion and extending rearward therefrom, and spur-wheels mounted in the lower end of said depending frame; together with means for rotating the spur-wheels, substantially as set forth.

2. The herein-described improved ice-velocipede, comprising a body portion or box-frame having a seat and provided with a front extension, an axle carried by said box-frame, runners having hubs mounted on the ends of said axle, said runners having upturned portions, a head formed on said front extension, a steering-post mounted in the head and having a runner pivotally carried thereby, means for limiting the pivotal movement of said runner, a depending frame pivotally connected to the box-frame and extending rearward

therefrom, spur-wheels mounted in the lower end of said depending frame, and means for rotating the spur-wheels, together with a supplemental seat for the driver, substantially as set forth.

3. In an ice-velocipede, the combination, of a box-frame having a seat and provided with a front extension consisting of parallel side bars united at their forward ends forming a head, runners pivoted to said box-frame, a steering-post mounted in the head and carrying a pivoted runner, a frame or fork pivoted at its forward end between the side bars extending rearward and having a free vertical movement, spur-wheels mounted upon an axle journaled in the rear end of said fork, a sprocket-wheel mounted upon the axle between said spur-wheels, a crank-shaft bearing in the side bars and having a sprocket-wheel mounted thereon which is connected by chain to the aforesaid sprocket-wheel; together with a seat-post extending upwardly from the box-frame, and a seat mounted at the upper end of said post, as herein shown and described.

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

ELIE BEAUDIN.

Witnesses:

WM. W. CARR,
NETTIE BEAUDIN.