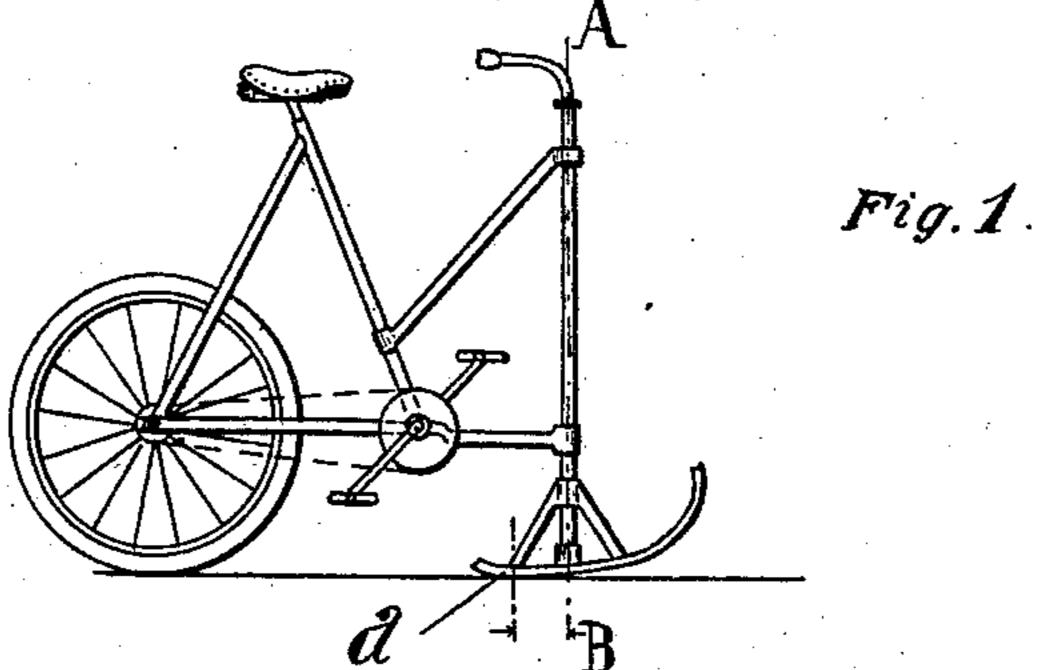
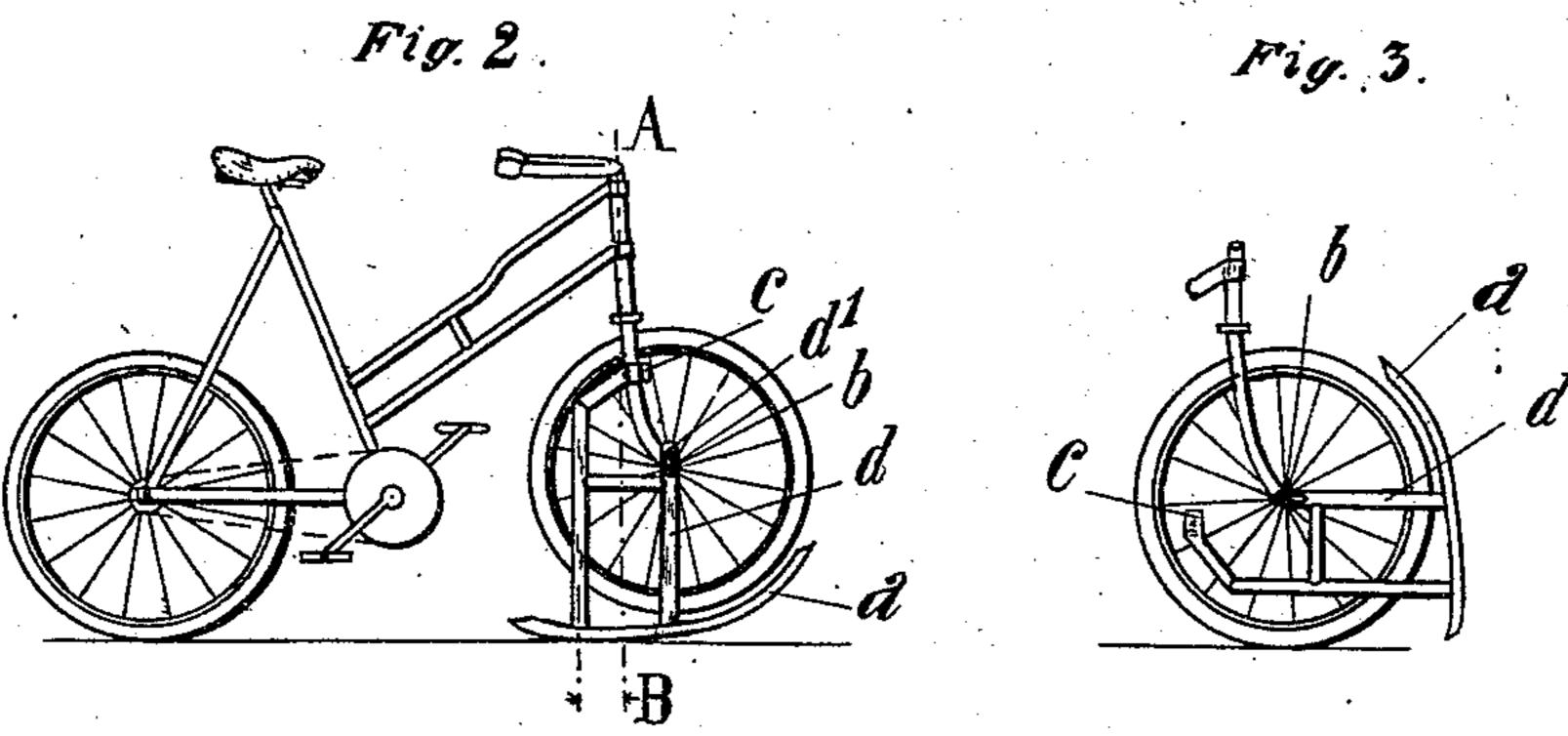
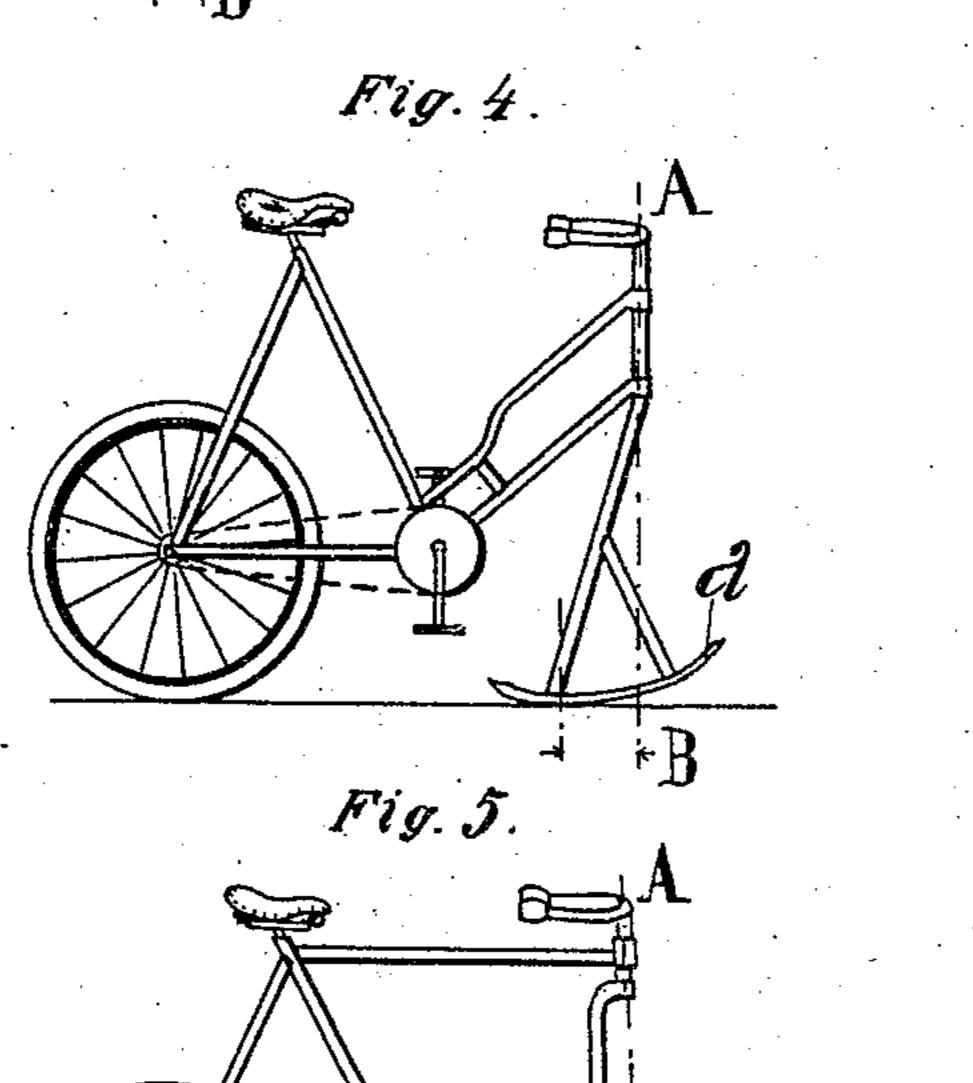
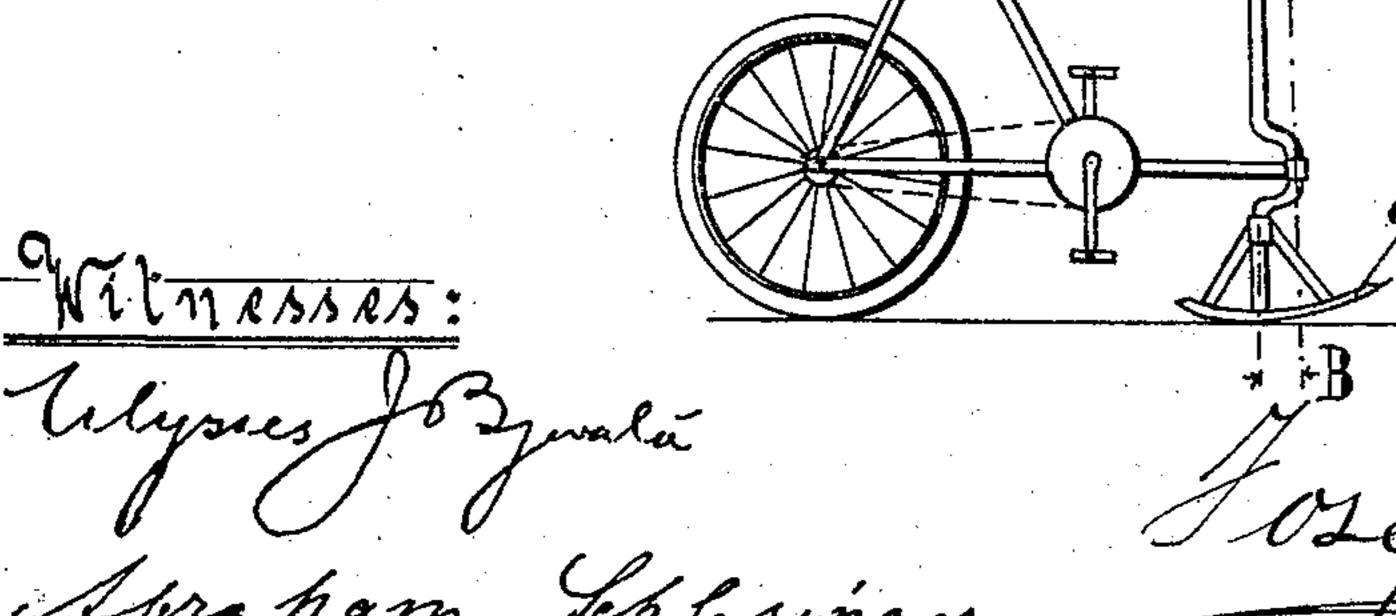
J. BALDAUF. CYCLE SLED.

APPLICATION FILED FEB. 6, 1906.









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UNITED STATES PATENT OFFICE.

JOSEF BALDAUF, OF OBERSTAUFEN, GERMANY.

CYCLE-SLED.

No. 850,125.

Specification of Letters Patent.

Patented April 16, 1907.

Application filed February 6, 1906. Serial No. 299,765.

To all whom it may concern:

Be it known that I, Josef Baldauf, a subject of the German Emperor, and a resident of Oberstaufen, Germany, have invented ed certain new and useful Improvements in Cycle-Sledges, of which the following is a

specification.

The present invention relates to a cyclesledge, which renders it possible to ride even
without utilizing the handles of the steeringbar. It is possible to ride without using the
steering-handles on account of the fact that
the point at which the pressure or the friction between the runner and the road may be
imagined to be concentrated is situated behind a vertical line A B, which may be
drawn vertically downward from the central
point of the steering-rod bearing. In the
case of this arrangement it is impossible for
the steering-rod to turn completely round
during riding, as is possible when the center
of pressure under the runner is in front of the
line A B.

The invention is illustrated in the accom-

25 panying drawings, in which-

Figure 1 is a side elevation of a cycle-sledge with a vertical steering-bar. Fig. 2 is a side elevation of a cycle-sledge in combination with an ordinary cycle. Fig. 3 is a side elevation of the front wheel and adjoining parts shown in Fig. 2, the runner being shown in the position it occupies when the machine is being used as an ordinary cycle. Fig. 4 is a side elevation of a cycle-sledge in which the lower portion of the steering-bar is inclined to the vertical. Fig. 5 is a side elevation of a cycle-sledge in which the steering-bar is not revoluble about its own axis.

In the case of the embodiment shown in Fig. 1, in which the cycle-sledge is provided with a vertical steering-bar, the runner a is curved, so as to be convex downward in such a way that the center of friction is situated behind the line AB. The effect which is obtained by this arrangement may also be obtained in the case of cycle-sledges with straight runners if about one-third of the runner is in front of and two-thirds of the runner behind the steering-bar, and also if the steering-bar while retaining its position at right angles to the runner is inclined backward.

Referring to Figs. 2 and 3, which show a cycle-sledge in combination with an ordinary

cycle, this arrangement makes it possible 5; for the rider to pass over roads which are free from snow because the runner only requires to be pulled forward in front of the front wheel, after having unscrewed the nuts b and c, for example, and hold it in that posi- 60 tion by tightening the nut b, and then when a track well covered with snow is again reached to be screwed again to the steeringbar by means of the same nuts b c on the fork of the front wheel or by means of other 65 suitable devices. In the case of this embodiment the front wheel may be either movable or fixed, and consequently may act at the same time as a support. In the latter case the supporting-arm d is suitably arranged to 70 be adjustable at d' in the direction of its length in order to avoid the friction of the tire against the upper portion of the runner when the latter is raised. Also in the case of this embodiment the runner is so curved 75 that the center of friction or pressure under said runner lies behind the line A B, which can be drawn perpendicularly downward from the central point of the bearing of the steering-bar.

Fig. 4 shows another embodiment of the cycle-sledge with a rigid curved runner a.

Fig. 5 is a side elevation of a cycle-sledge in which the steering-rod is not revoluble about its own axis, but is hung like a door on 85 hinges by means of crank-arms.

What I claim as my invention, and desire

to secure by Letters Patent, is—

1. A cycle-sledge comprising in combination a frame, a back wheel mounted in said 90 frame, a revoluble steering-bar mounted on said frame, a bearing for supporting said steering-bar, a front wheel mounted on said steering-bar and an adjustable runner also fixed to said steering-bar, the center of pressure between the runner and the ground being behind a point vertically under the central point of the steering-rod bearing.

2. A cycle-sledge comprising in combination a frame, a back wheel mounted in said 100 frame, a revoluble steering-bar mounted on said frame, forks fixed to said steering-bar, a bearing for supporting said steering-bar, a front wheel mounted in the forks on said steering-bar and a runner fixed to said forks, 105 the means for fixing said runner consisting of two bars detachably attached to the forks one at each side, and two bars revolubly

mounted on the front-wheel axle one at each side whereby the runner can when not in use be placed in front of the front wheel, the center of pressure between the runner when in use and the ground being behind a point vertically under the central point of the steering-rod bearing.

In testimony whereof I have signed my name to this specification in the presence of two witnesses.

JOSEF BALDAUF.

Witnesses:

Ulysses J. Bywater, Abraham Schlesinger.