

B. SCHRÖDER.
Shafts for Vehicles.

No. 138,442.

Patented April 29, 1873.

Fig. 1.

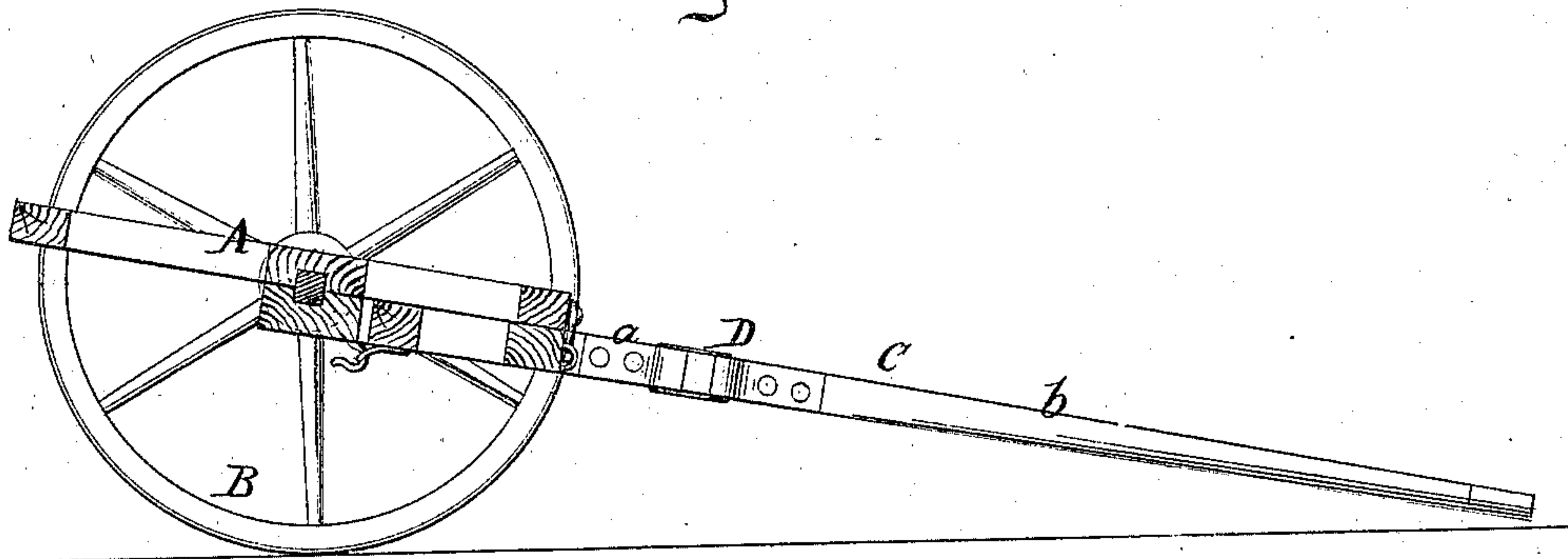


Fig. 2.

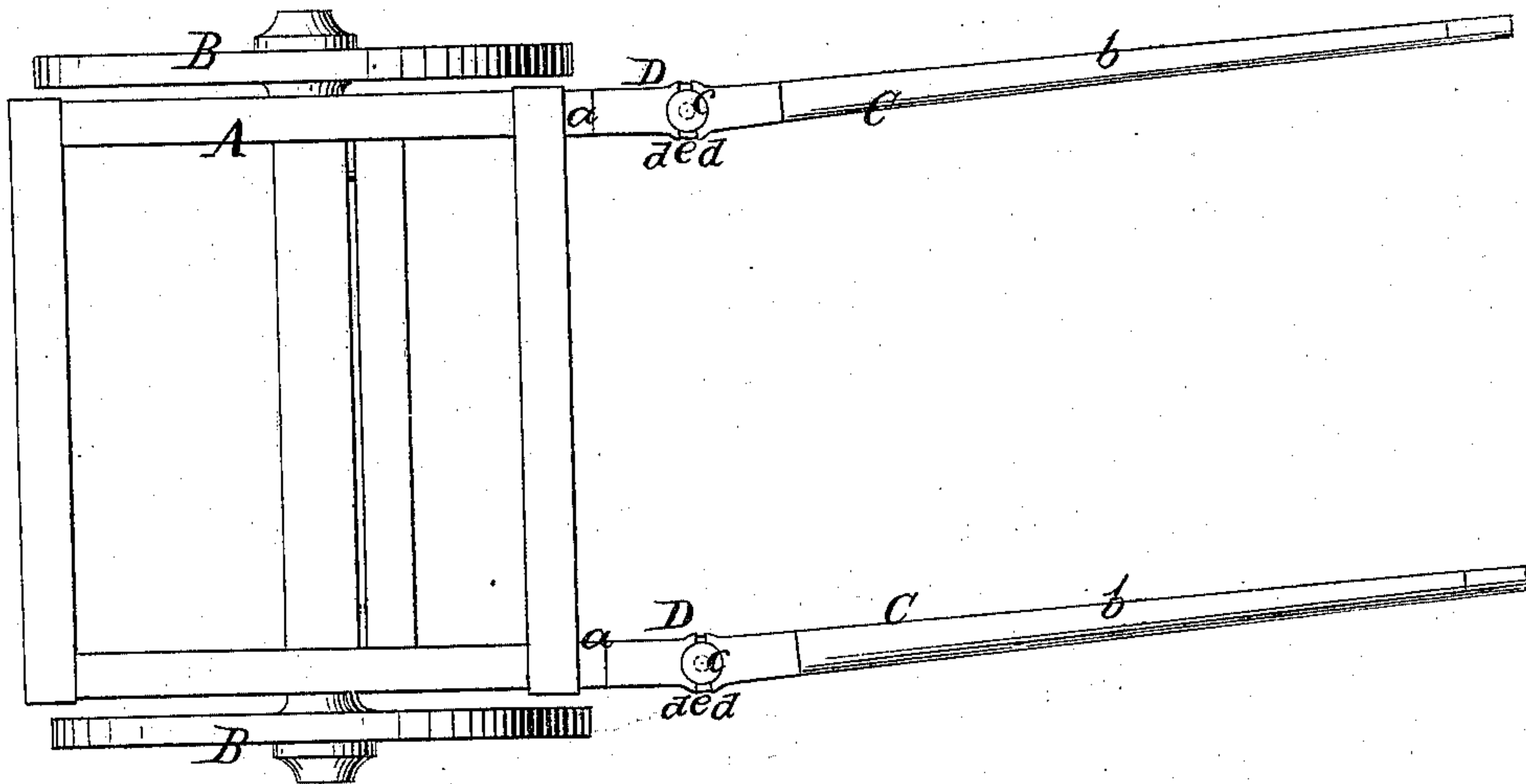
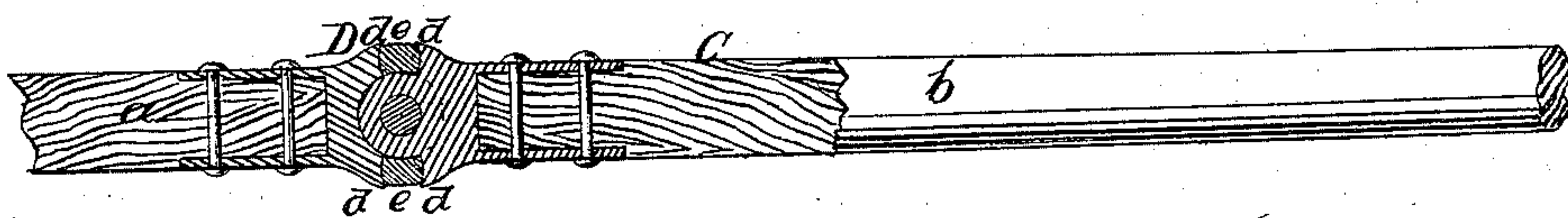


Fig. 3.



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IMPROVEMENT IN SHAFTS FOR VEHICLES.

Specification forming part of Letters Patent No. **138,442**, dated April 29, 1873; application filed March 28, 1873.

To all whom it may concern:

Be it known that I, BERNHARD SCHRÖDER, of Newark, in the county of Essex and State of New Jersey, have invented a new and useful Improvement in Draft-Poles for Vehicles; and I do hereby declare the following to be a full, clear, and exact description thereof, which will enable those skilled in the art to make and use the same, reference being had to the accompanying drawing forming part of this specification, in which drawing—

Figure 1 represents a longitudinal vertical section of my invention. Fig. 2 is a plan or top view of the same. Fig. 3 is a horizontal section of the same in a larger scale than the previous figures.

Similar letters indicate corresponding parts.

This invention consists of a hinge-joint for thills or draft-poles; and which joint is provided with lips, between which are placed elastic pads, so that the draft-pole is free to yield; at the same time its connection with the vehicle is sufficiently rigid to control the motion of said vehicle.

In the drawing, the letter A designates the body or truck of a vehicle, which is supported by two wheels, B. To this vehicle is attached a draft-pole, C, which is made in two sections, *a b*, the rear section *a* being connected to the vehicle in the usual manner; while the front section *b* is secured to the rear section *a* by means of a pivot, *c*, passing through said section in a vertical direction, so that the front section is free to swing in a horizontal plane independent of the rear section.

If the draft-pole of a vehicle is made rigid from end to end, and the vehicle to which said pole is attached passes over a rough road, the front end of the pole is violently jerked to and fro, and the draft-animals are subjected to an injurious strain. This difficulty is obviated by my invention.

In practice I connect the two sections of my pole by means of a hinge-joint, D, the two parts of which are provided with sockets to receive the ends of the two sections of the pole, (best seen in Fig. 3,) and each of said parts is provided with lips *d*, between which are placed elastic pads *e*, by preference made of India rubber, so that the front end of the draft-pole is rendered yielding, while its connection with the rear section of the pole is sufficiently rigid to enable the draft-animals to keep the motions of the vehicle under perfect control.

My invention is applicable to thills, as shown in the drawing; and it can also be applied to single draft-poles.

What I claim as new, and desire to secure by Letters Patent, is—

The hinge-joint D, each part of which is provided with lips *d d* for confining in place the elastic pads *e*, in combination with a draft pole or shaft, made in two sections, *a b*, substantially as and for the purpose described.

BERNHARD SCHRÖDER.

Witnesses:

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