

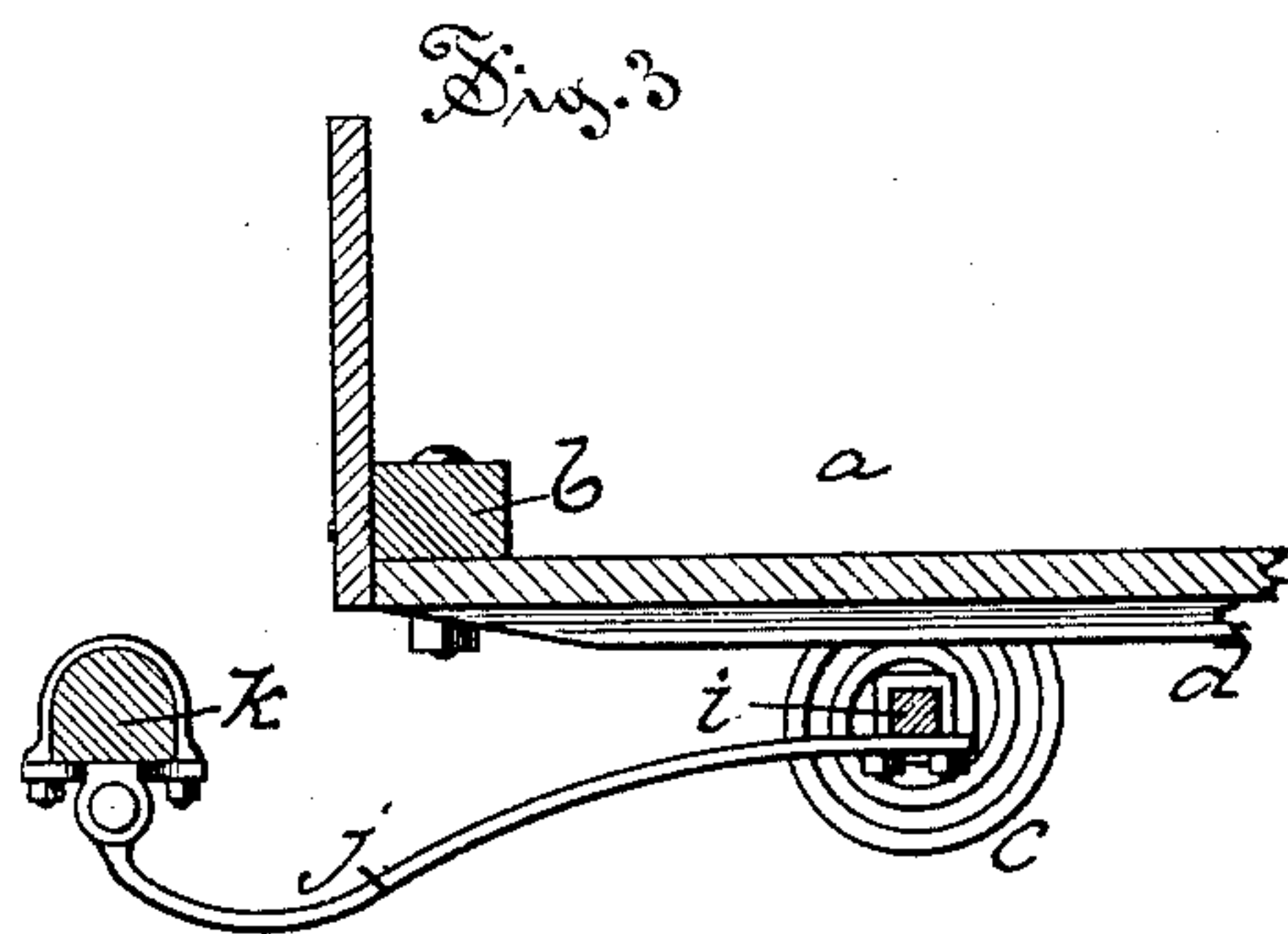
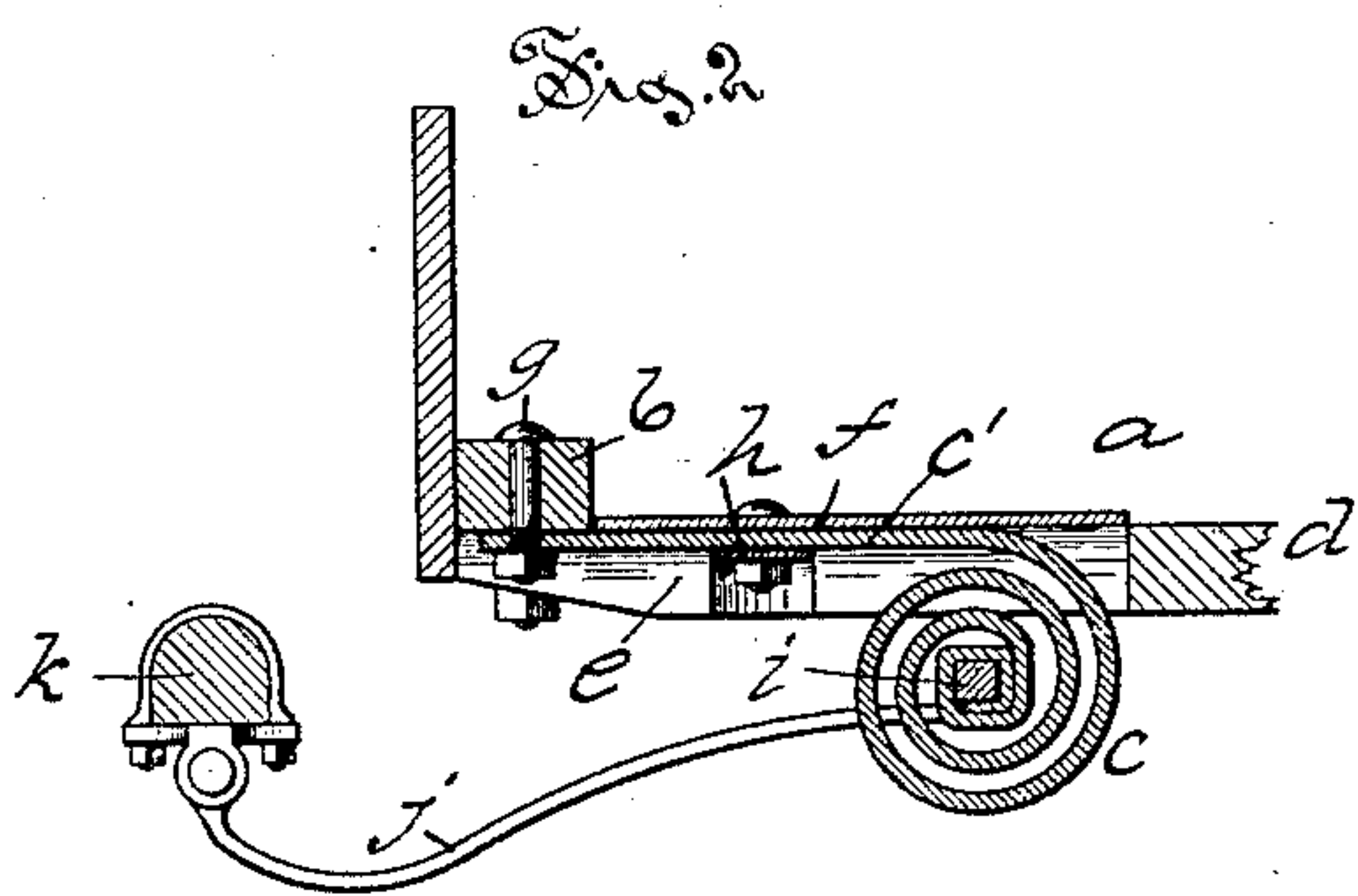
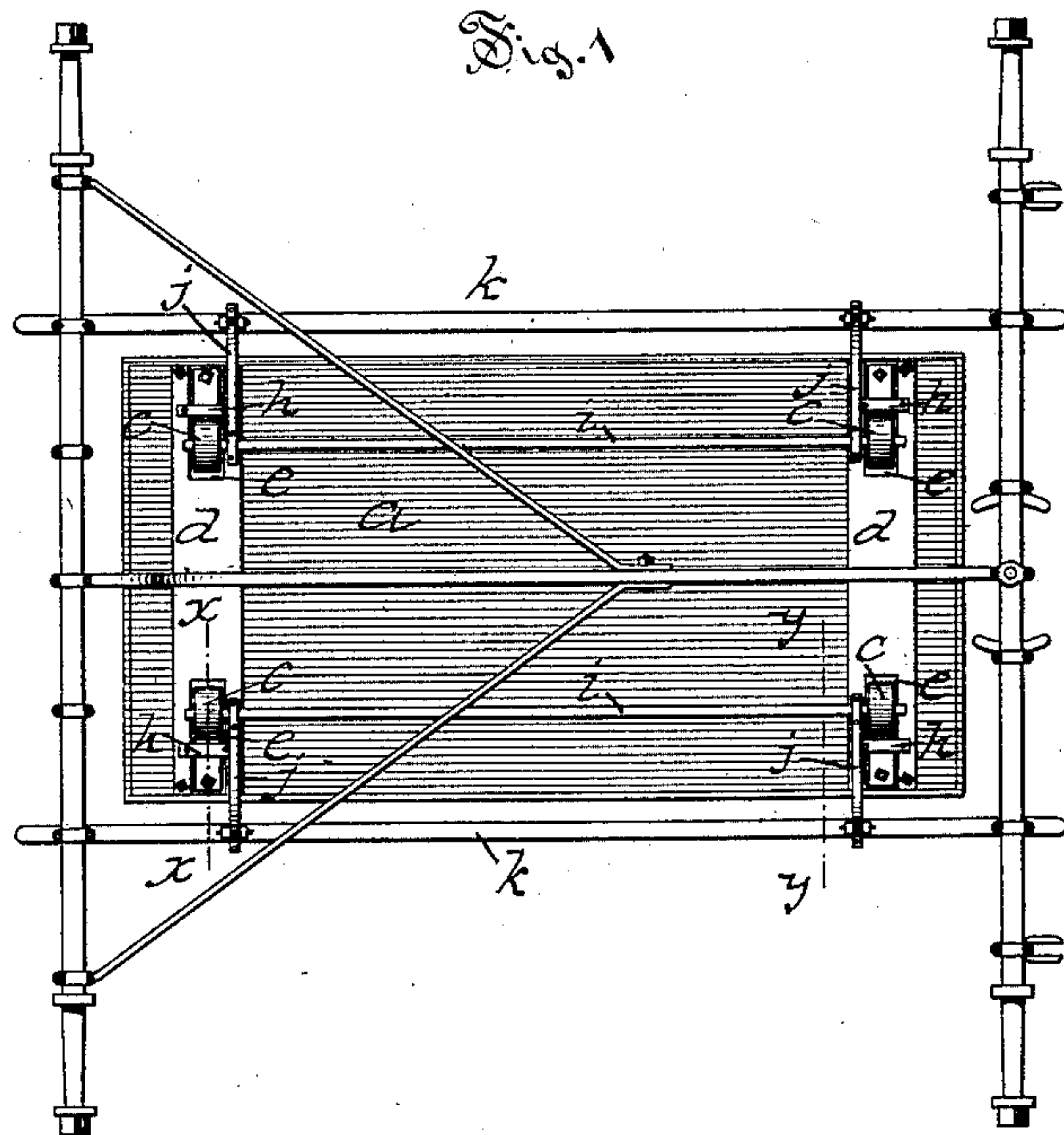
(No Model.)

E. W. FANCHER.

SIDE BAR WAGON.

No. 341,229.

Patented May 4, 1886.



Witnesses:

W. M. Dyorkman

A. R. Williams

Inventor

Emery W. Fancher,

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Atty.

UNITED STATES PATENT OFFICE.

EMERY W. FANCHER, OF CANTON, CONNECTICUT.

SIDE-BAR WAGON.

SPECIFICATION forming part of Letters Patent No. 341,229, dated May 4, 1886.

Application filed December 31, 1885. Serial No. 187,215. (No model.)

To all whom it may concern:

Be it known that I, EMERY W. FANCHER, of Canton, in the county of Hartford and State of Connecticut, have invented a certain new and useful Improvement in Side-Bar Wagons, of which the following is a description, reference being had to the accompanying drawings, where—

Figure 1 is a bottom view of a wagon box and so much of the appurtenant gear as involves the application of my improvement. Fig. 2 is a detail view in vertical cross-section on plane *x x*. Fig. 3 is a detail view in vertical cross-section on plane *y y*.

This improvement pertains to that class of wagons known as "side-bar" wagons, the practical advantages of which are such that they have become firmly fixed in popular favor.

It is the object of the present improvement to utilize in this class of wagons a coiled spring, with the coil depending or hanging downward, partly hidden from sight by being located in one of the cross-bars, with the outer end firmly attached to one of the side sills of the wagon-body, giving thereby the strongest possible attachment, and with two of these springs upon each side of the wagon, connected in their action by a common shaft or axis; and the invention resides in the details of construction which permit the attainment of the said purpose.

The letter *a* denotes the wagon-body as a whole, along the sides of which there are side sills, *b*.

The letters *c c'* denote the so-called "coiled springs," *c* denoting the coiled part, and *c'* the tangential projection. The outer end of these coiled springs—that is, the outer end of the tangential projection—is securely bolted to one of the side sills, *b*.

The letters *d* denote cross-bars connecting the side sills of the wagon, mortised by mortises *e* at the ends, and in these mortises the

coiled springs partly lie, being thereby partly concealed from sight, leaving the inner coiled part, *c*, depending or hanging downward. On the top of the cross-bars *d* there are metallic covering-plates *f*, to which the tangential parts of the coiled springs are firmly attached by bolts and clips *h*.

The central part of the coiled portion of the springs is formed into a square or many-sided socket, receiving therein the square or many-sided connecting-rods *i*, the two springs upon either side of the wagon being connected to each other in action by such a connecting-rod.

The letters *j* denote arms securely clipped to the connecting-rods *i* at the inner end, and at the outer end properly shackled to the side bars, *k*.

It will be readily understood from the foregoing description that by means of such details of construction as are hereinbefore described and shown I am enabled to use a coiled spring having its tangential part securely connected to the side sills of the wagon-body, getting thereby the strongest possible attachment to the wagon-body, the body of the spring lying partly in and concealed by the cross-bars, with the coiled part of the spring depending or hanging downward, and the two springs upon each side of the wagon-body connected in their action.

I claim as my improvement—

In combination, the wagon-body sills *b*, the mortised cross-bars *d*, the springs *c c'*, lying partly in said mortises, with the outer ends fastened to the side sills, and a coil depending from the inner end, the connecting-rods *i*, the arms *j*, and the side bars, *k*, all substantially as described, and for the purpose set forth.

EMERY W. FANCHER.

Witnesses:

EDMUND R. HOUGH,
WM. H. GOODWIN.