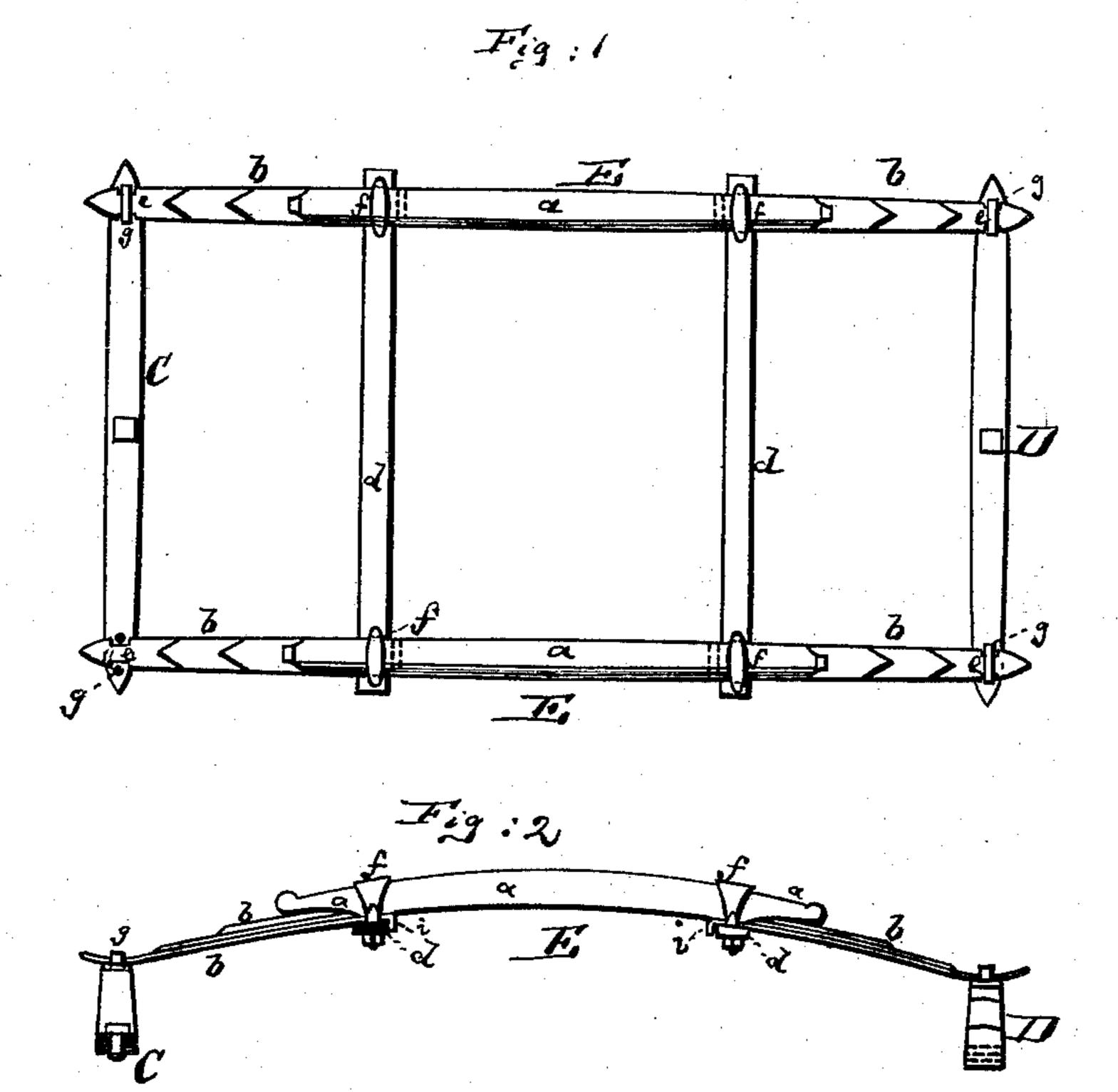
## J. F. BARNECOTT. SIDE-BAR WAGON

No. 169,885.

Patented Nov. 16, 1875.



Witnesses: A. Moraga. O. Meednes

Inventor

J. F. Barnecott

by his attorney

AvSnesen

## UNITED STATES PATENT OFFICE

JOHN F. BARNECOTT, OF WESTCHESTER, NEW YORK.

## IMPROVEMENT IN SIDE-BAR WAGONS.

Specification forming part of Letters Patent No. 169,885, dated November 16, 1875; application filed June 28, 1875.

To all whom it may concern:

Be it known that I, John F. Barnecott, of New York city, N. Y., have invented an Improved Side-Bar Wagon, of which the following is a specification:

Figure 1 represents a plan view of the side bars and springs of my improved side-bar wagon. Fig. 2 is a side view of the same.

Similar letters of reference indicate corre-

sponding parts in both figures.

This invention relates to an improvement in that class of side-bar wagons in which the side bar is made rigid in the middle, and of metallic springs at the ends; and the invention consists in the peculiar manner of fastening the metallic end springs to the rigid middle bar and to the transverse springs, as hereinafter more fully described.

In the drawing, the letters C and D represent two semi-elliptical or other springs, which rest respectively on the front and rear axles of a wagon. E E are the side bars, resting with their ends on the springs C and D. These side bars E E are of stiff wood or other stiff material a at their middle portion, while the ends are made of metallic leaf-springs b b. The

lower leaf of each spring b has its inner end bent into a hook, i, to fit over the bottom bar of a clip, f, that embraces the rigid bar a at or near its end, and also the spring b. By this hook i and clip f the metallic spring b is fastened to the rigid bar a. At the outer end the lower leaf of each metallic spring b is provided with a narrow neck, e, and is connected to the transverse spring C or D by means of a staple, g g, that straddles the neck e, and that is fastened to the said transverse spring. In this way a flexible joint is produced, and yet lateral up and down, or forward and backward, play of the side bars at the joints is prevented.

I claim as my invention—

The combination of a side bar, composed of the stiff middle portion a and spring ends b b, each lower spring leaf b having a hook i formed on its inner end, and a narrow neck, e, on its outer end, with the clips f f, staples g g, and transverse springs C D, all substantially as herein shown and described

J. F. BARNECOTT.

Witnesses:

A. V. BRIESEN, F. V. BRIESEN.