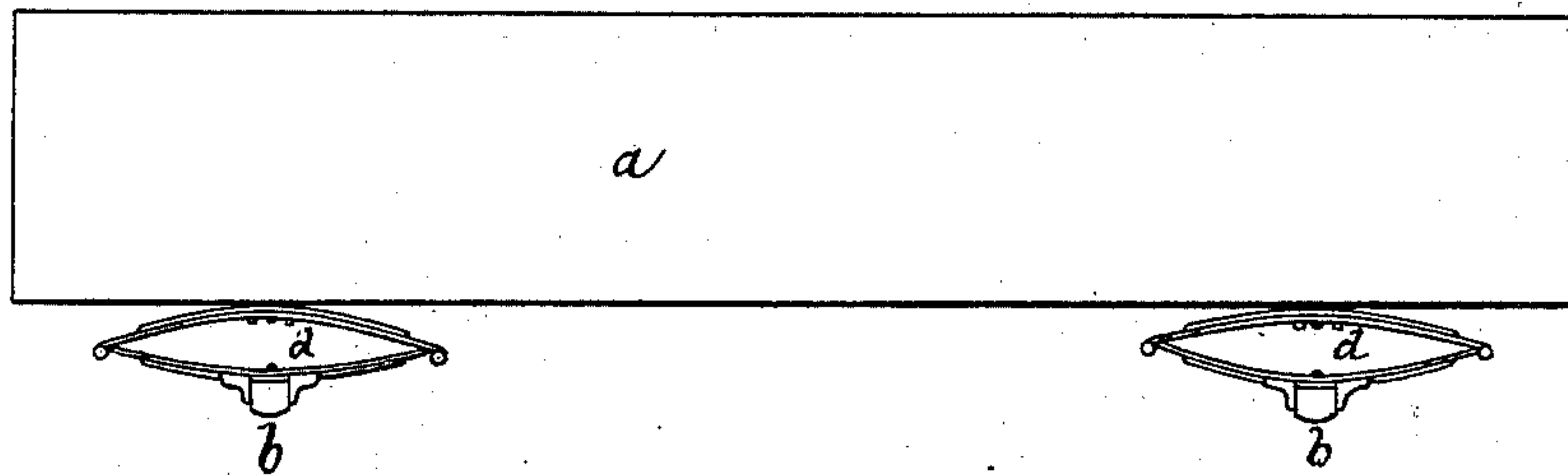


W. A. SWEET.  
Vehicle-Spring.

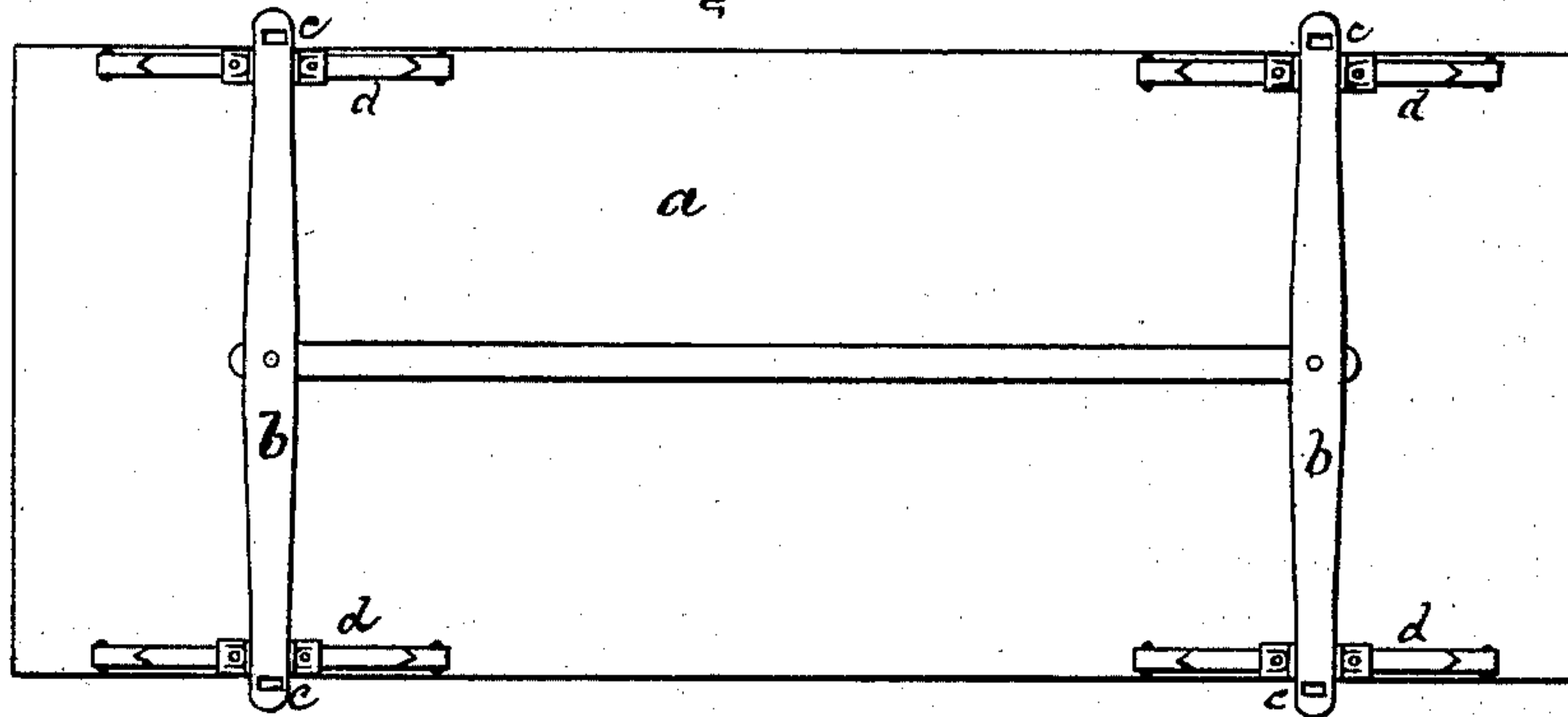
No. 216,116.

Patented June 3, 1879.

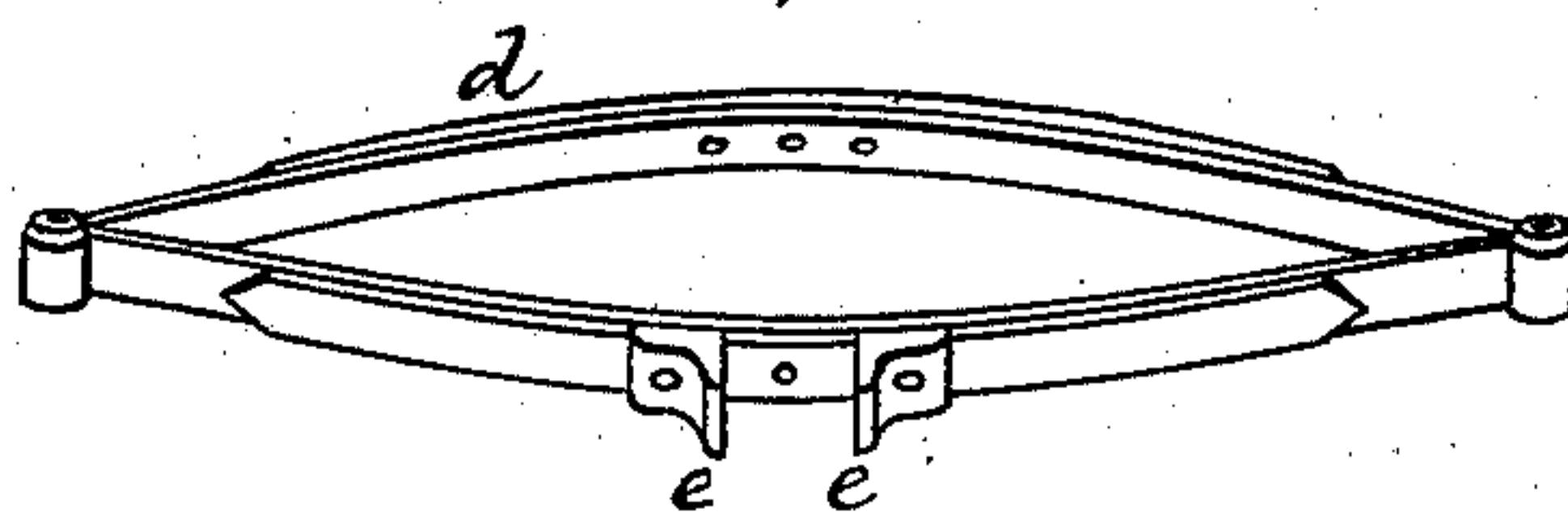
*Fig. 1.*



*Fig. 2.*



*Fig. 3.*



Witnesses:  
A. G. Thorne  
H. White

Inventor:  
W. A. Sweet  
by J. J. Greenough.

# UNITED STATES PATENT OFFICE.

WILLIAM A. SWEET, OF SYRACUSE, NEW YORK.

## IMPROVEMENT IN VEHICLE-SPRINGS.

Specification forming part of Letters Patent No. **216,116**, dated June 3, 1879; application filed March 24, 1879.

*To all whom it may concern:*

Be it known that I, WILLIAM A. SWEET, of Syracuse, New York, have invented certain Improvements in the Construction of Elliptic Springs and their Attachment to Wagon-Bodies, of which the following is a specification.

My improvement consists in adding to any ordinary springs, as described, applied to wagons used for heavy loads, &c., certain clips or lugs, which can be set at any desired distance apart, by means of which the springs are held in place upon the bolster without being affixed thereto, the springs being permanently fastened to the wagon-body, one at each end of the two bolsters of the running-gear on which the body rests, so that the springs are lifted off from the running-gear with the body when it is removed, and are as readily replaced with it without removing or inserting any bolts.

The construction is as follows:

Referring to the drawings, Figure 1 is a side elevation of the body, springs, and other parts. Fig. 2 is a plan of the under side of the same parts. Fig. 3 is a spring detached.

The body *a* and bolsters *b* are of ordinary construction, having stakes *c* projecting up

from the ends of the bolsters beside the wagon-body *a*, to hold it steadily in place.

Between the under side of the body and the upper surface of the bolsters four elliptic springs, *d*, are placed, one on each end of the bolsters *b*, inside the stakes *c*. These springs are constructed in any of the ordinary forms of leaf-springs, and are securely affixed to the wagon-body. To the lower section of these springs are affixed clips or lugs *e*, of metal, as seen in Fig. 3. These lugs extend down on each side of the bolster, which they embrace to keep the spring securely in place, while they can freely part from the bolster when the wagon-body is removed.

Having thus fully described my improved spring attachment, I claim—

The elliptic spring *d*, having clips or lugs *e* attached thereto, substantially in the manner and for the purposes herein described, without being affixed to the bolster, said spring being firmly attached to the wagon-body, as specified.

W. A. SWEET.

Witnesses:

J. J. GREENOUGH,  
J. P. MUNRO.