

G. D. DUDLEY.
Wire-Wheels.

No. 147,050.

Patented Feb. 3, 1874.

Fig. 1

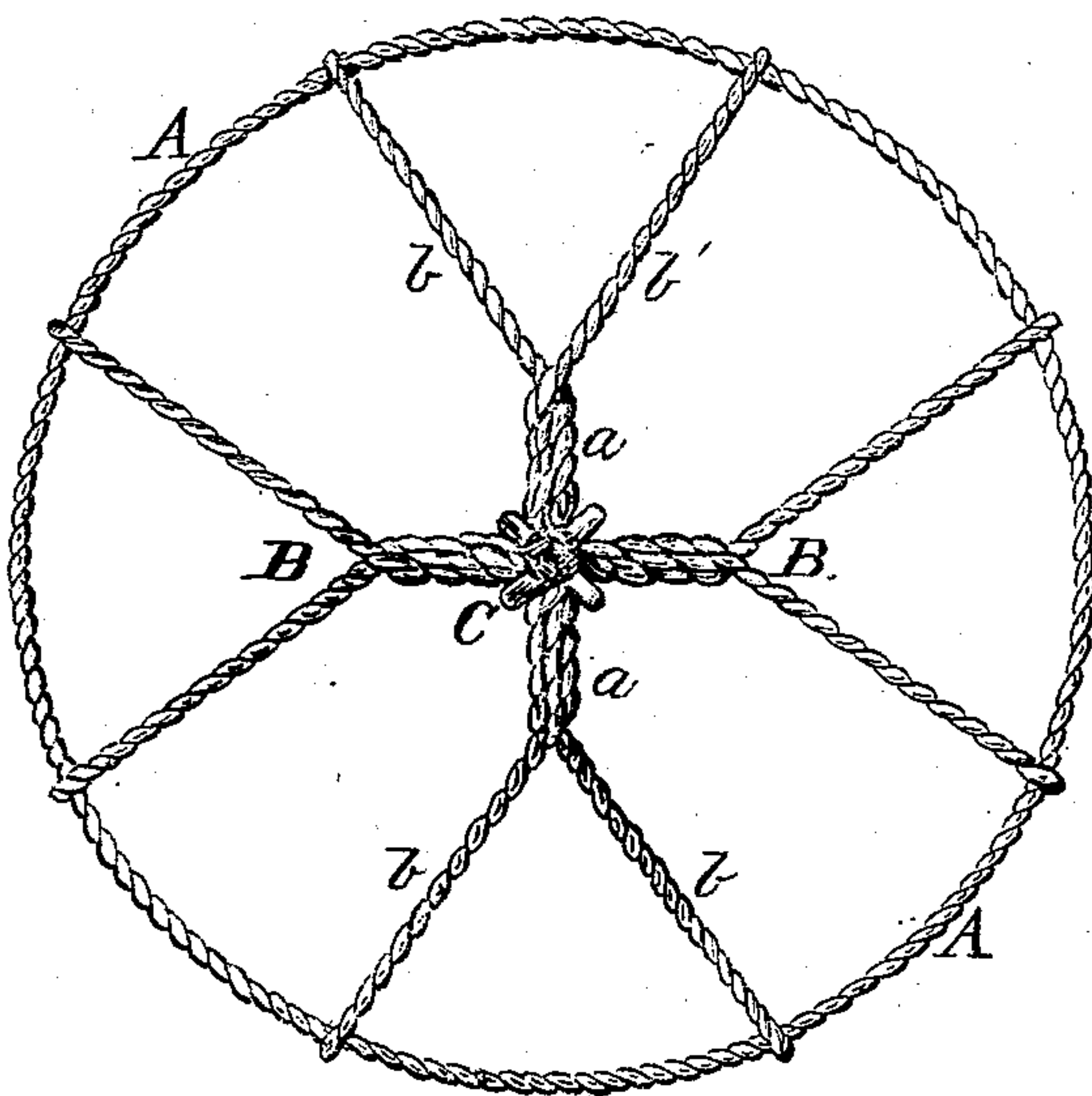


Fig. 2

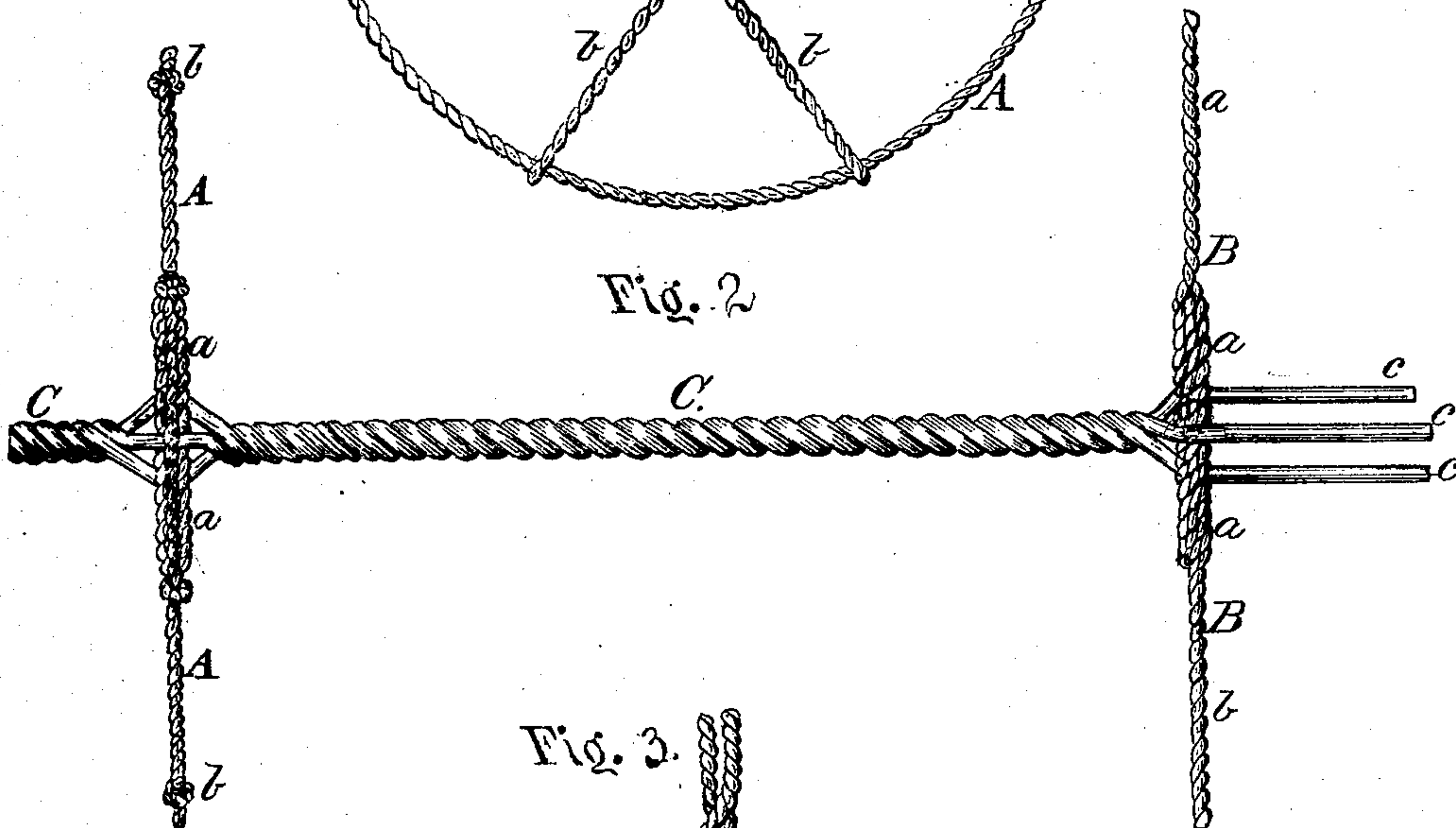
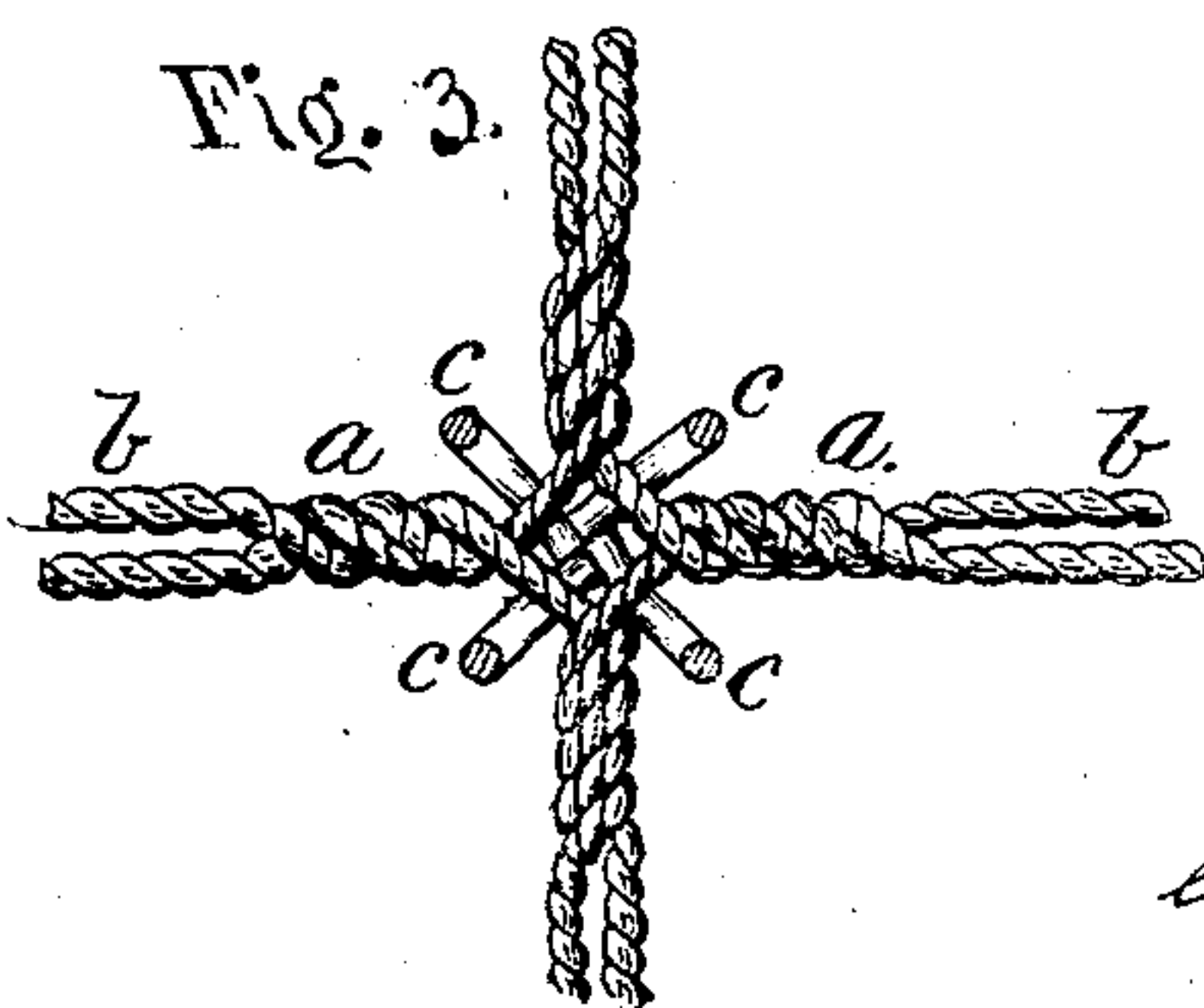


Fig. 3



Witnesses.

E. V. Johnson.
J. P. Crawford

Inventor

G. D. Dudley
Car. M. Quincy

UNITED STATES PATENT OFFICE.

GEORGE D. DUDLEY, OF LOWELL, MASSACHUSETTS, ASSIGNOR TO EDWD. P. WOODS, DANIEL SHERWOOD, AND C. H. LATHAM, OF SAME PLACE.

IMPROVEMENT IN WIRE WHEELS.

Specification forming part of Letters Patent No. **147,050**, dated February 3, 1874; application filed June 27, 1873.

To all whom it may concern:

Be it known that I, GEORGE D. DUDLEY, of Lowell, in the county of Middlesex and State of Massachusetts, have invented a new and Improved Wire Wheel, of which the following is a specification:

My invention relates to wheels made of wire; and consists in a novel manner of constructing a wheel from wire, and has for its object a light, neat, cheap, and useful wheel, which may be used for a great variety of purposes—as, for instance, in rotary wire casters, toy carriages, wheels, &c.

Figure 1 is a side elevation of the wheels. Fig. 2 is an edge view of the wheels, showing the shaft with its extremities in different conditions; and Fig. 3 shows a front view of the right-hand end of Fig. 2.

A A represent a ring of wire, which serves as the rim of the wheel. B B represent the arms, composed of strands of wire which are twisted up from the center of the wheel a short distance in a compound twist, *a a*, are then separated, as shown at *b b*, and carried to the rim A, to which they are properly secured. C represents the shaft, constructed in this instance of four wires, *c c c c*, but which may consist of an indefinite number of wires. The

manner of securing or uniting the wheel to the shaft will be readily perceived by reference to Figs. 2 and 3. The wires constituting the shaft are twisted together to the desired distance between the two wheels, and being then separated at each extremity of the shaft, as seen at *c c c c*, Figs. 2 and 3, the arms of the wheels are then inserted between the wires *c c c c*, which are then twisted together to form the continuation of the shaft outside of the wheels, which are thus firmly secured to the shaft by being intertwisted with the wires, constituting it as shown in the left-hand portion of Fig. 2.

After the wheels are complete they are immersed in a metallic bath usually of tin, which imparts to them a permanently-bright appearance, and also serves to fill the interstices with metal and solder the parts together.

I claim—

As a new and improved article of manufacture, a wire wheel and axle, made up of ring A, arms B, and shaft C, and united together, substantially in the manner described.

GEORGE D. DUDLEY.

Witnesses:

H. F. SLOCUM,
C. H. COOKE.