(No Model.)

## M. COLLINS. DOUBLE ACTING SWIVEL.

No. 400,749.

Patented Apr. 2, 1889.



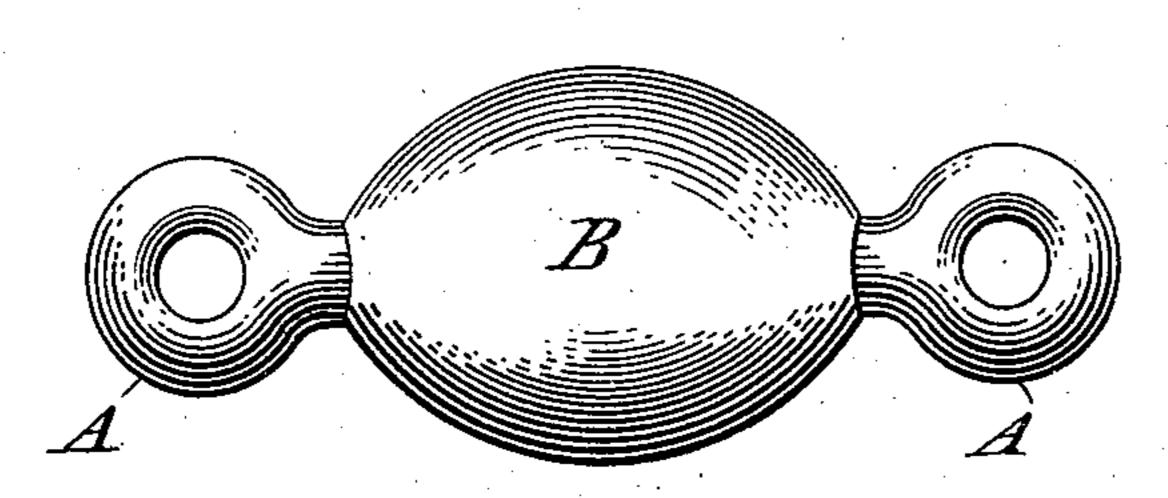


Fig.2

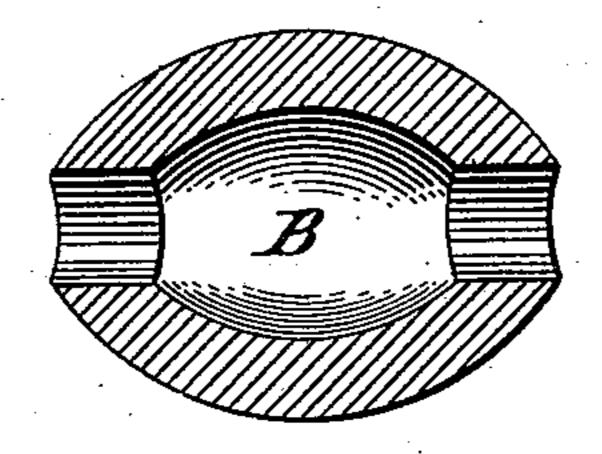


Fig. 3.

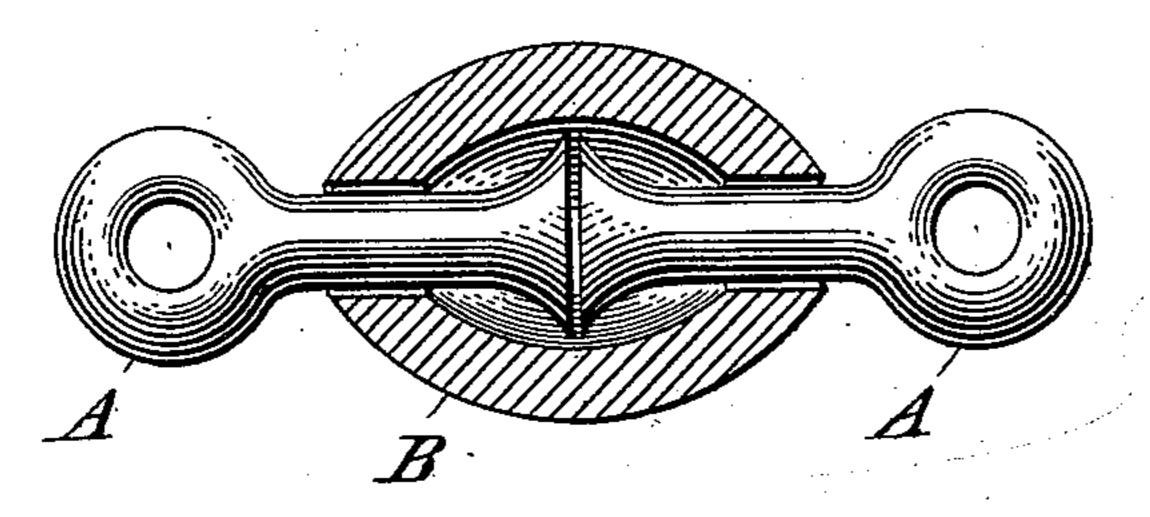
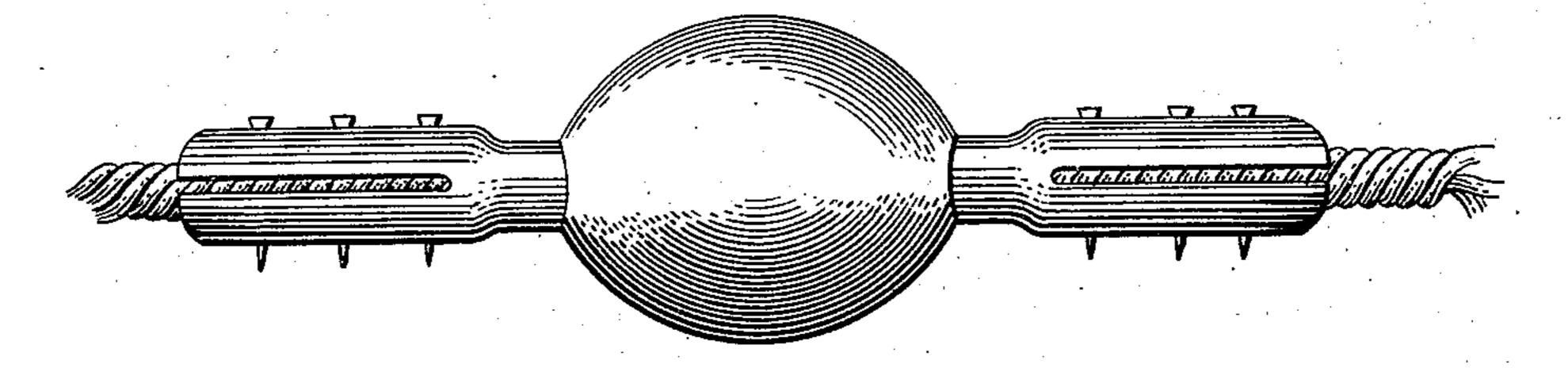


Fig.4.



Witnesses: Pobert.B. M. Kee Followson Ahstronse

Inventor: Matthias Collins.

## United States Patent Office.

MATTHIAS COLLINS, OF FREEPORT, PENNSYLVANIA.

## DOUBLE-ACTING SWIVEL.

SPECIFICATION forming part of Letters Patent No. 400,749, dated April 2, 1889.

Application filed June 1, 1888. Serial No. 275,789. (No model.)

To all whom it may concern:

Be it known that I, MATTHIAS COLLINS, a citizen of the United States, residing at Free-port, in the county of Armstrong and State of Pennsylvania, have invented a new and useful Double Swivel and Cable-Hitch, of which the following is a greeification

the following is a specification.

The object of the double swivel is to supersede the now used single swivel, over which it is an improvement, because the double swivel protects all its parts against wear and tear, weather and filth, and will not choke or fail to act. The single swivel is void of all these qualities, besides being insecure and liable to part after long use, as its working parts are all unprotected. The double swivel can be used in the construction of steam or sail boats, wooden or iron bridges, for locks, dams, cranes, derricks, chains of all kinds, and any place where a swivel is needed. The double swivel can also be used as a cable-hitch, as per accompanying drawings.

I illustrate the mechanism of my invention by the accompanying drawings, in which—

Figure 1 is the swivel complete. The parts marked A, I will call the "ends," and the part marked B, I will call the "center."

Similar letters refer to similar parts through-

out the several views.

Fig. 2 is a longitudinal sectional view of the center of the swivel as it would appear were it cut in half after its completion

it cut in half after its completion.

A are placed in position as they would be in the complete swivel. Fig. 4 is the swivel used as a cable-hitch. The cable would be attached

in the precise manner shown by the drawings, and is so simple that explanation is useless.

The center or shell of the swivel is hollow, and has at each end a cylindrical opening connecting the hollow portion of the interior of the shell with the outside. In these holes the shanks of the end pieces play loosely, the end pieces being retained in their places by means of the enlarged interior ends nearly filling 45 the hollow in the shell or center, said end pieces having eyelets or other suitable means for connecting their outer extremities to ropes, wires, rods, chains, and the like.

The swivel, which I will call the "king 50 double swivel and cable-hitch," will be made of iron, steel, malleable iron, and other metals, and will be made without a weld. I will make the two ends first. The center will be a hollow cylinder. Will put the two ends in 55 cold, the center being hot; then put in swages and close up, and the swivel is made.

What I claim is—

In a double swivel, the combination of a hollow body provided with orifices at each 60 end of less diameter than the hollow itself, with two end pieces whose shanks play loosely in said orifices, and whose interior ends are enlarged, so as to nearly fill the hollow in the central body, the said exterior ends being 65 provided with rings or other suitable means for connecting them with ropes, chains, &c., substantially as described.

MATTHIAS COLLINS.

Witnesses:

A. L. STROUSE,

J. B. MILLER.