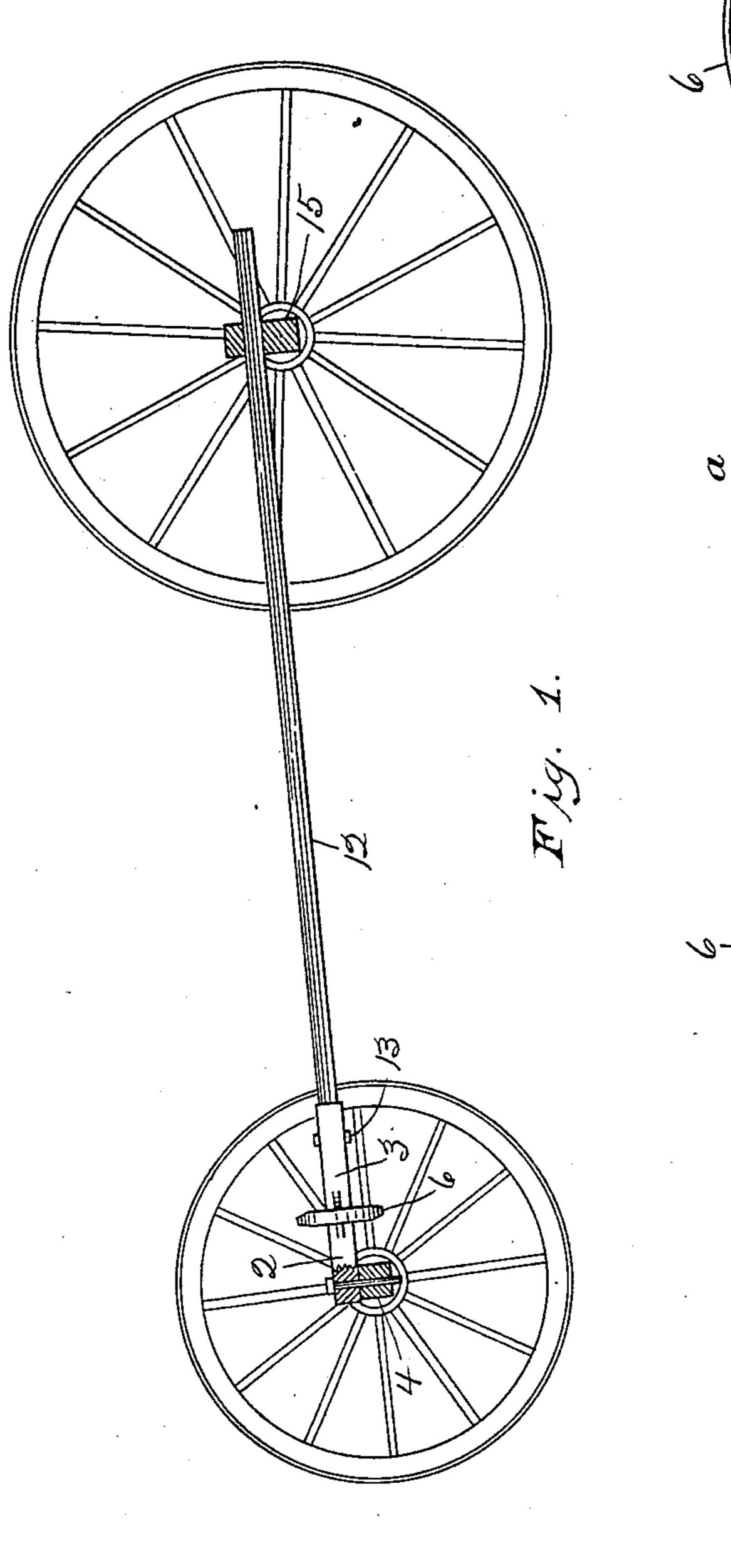
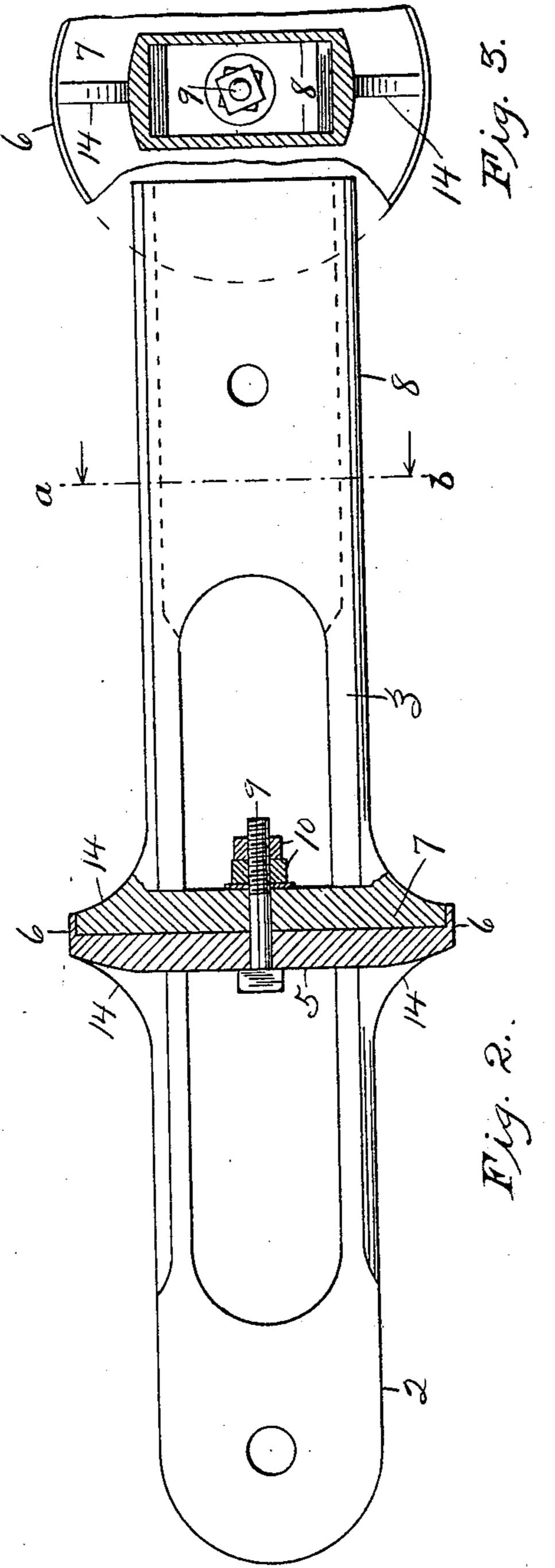
N. M. ARNOLD. WAGON COUPLING POLE.

(Application filed Jan. 21, 1901.)

(No Model.)





WITNESSES:

Mell. Imboden, M. L. Lange. INVENTOR,

IN. M. Arnold.

By Higdon & Higdon,

ATTYS.

United States Patent Office.

NEWTON M. ARNOLD, OF HELENA, MISSOURI.

WAGON COUPLING-POLE.

SPECIFICATION forming part of Letters Patent No. 678,855, dated July 23, 1901.

Application filed January 21, 1901. Serial No. 44,022. (No model.)

To all whom it may concern:

Be it known that I, NEWTON M. ARNOLD, a citizen of the United States, and a resident of Helena, in the county of Andrew and State of Missouri, have invented new and useful Improvements in Wagon Coupling-Poles, of which the following is a specification.

My invention relates to improvements in wagon coupling-poles; and the object of my invention is to provide a coupling-pole with a swivel-joint, by means of which all wrenching or splitting of the coupling-pole will be obviated. The ordinary pole is usually split by the torsional strain caused by the relative movements of the fore and rear axles. My device permits of any amount of torsional motion of the two sections of the pole, while relieving the pole and axles of all strain.

To this end my invention consists in the novel construction hereinafter described and claimed, and illustrated in the accompanying drawings, in which—

Figure 1 is a side view of my invention as applied to the coupling - pole of a wagon. Fig. 2 is an enlarged top plan view, partly in section, of the coupling. Fig. 3 is a transverse section of the same, taken on line a b of Fig. 2.

comprises two members 2 and 3, pivotally secured together, as hereinafter described. The member 2 is provided with a hole for the king-bolt and lies above the forward axle 4.

2 is a circular disk 5, provided with an annular flange 6 on its face opposite to said arms. Rotatably mounted against the face of disk 5 within flange 6 is a disk 7, formed 40 integral with two arms of a socket 8, which

is shown in section in Fig. 3. The disks 5 and 7 are secured together by a bolt 9 and

two taps or nuts 10, which are of course adjusted so as to permit easy relative rotation between disks 57. The forward end of 45 the coupling-pole is secured in the socket 8 in any suitable or preferred manner, as by a bolt 13. 14 designates stiffening ribs or members 2 and 3. It will thus be seen that when the wagon is passing over an irregular 50 surface the relative movements of the axles 4 and 15 will not be resisted by the coupling-pole, and hence the pole will remain sound and strong.

Having now fully described my invention, 55 what I claim as new, and desire to secure by Letters Patent of the United States, is—

1. A swivel-joint for coupling-poles, comprising a disk having a circular recess in one of its sides, a perforated lug having arms 60 formed integral with said disk, a circular disk mounted in said recess, a bolt passing centrally through said disks, and a socket for one end of the coupling-pole, having arms formed integral with said circular disk, 65 substantially as described.

2. A swivel-joint for coupling-poles, comprising a bifurcated lug for connection to the king-bolt, a disk or plate integral with the arms of said lug, an annular peripheral 70 flange on the face of said plate opposite said arms, a circular disk or plate in contact with the aforesaid plate, within said flange, a central bolt passing through said plates, and a bifurcated socket having its arms formed in-75 tegral with said last-named plate, substantially as described.

In testimony whereof I affix my signature in the presence of two witnesses.

NEWTON M. ARNOLD.

Witnesses:
W. H. Sharp,
JAMES GRAHAM.