

No. 668,091.

Patented Feb. 12, 1901.

P. W. CARNEY.
EXTENSIBLE AXLE.

(Application filed June 30, 1900.)

(No Model.)

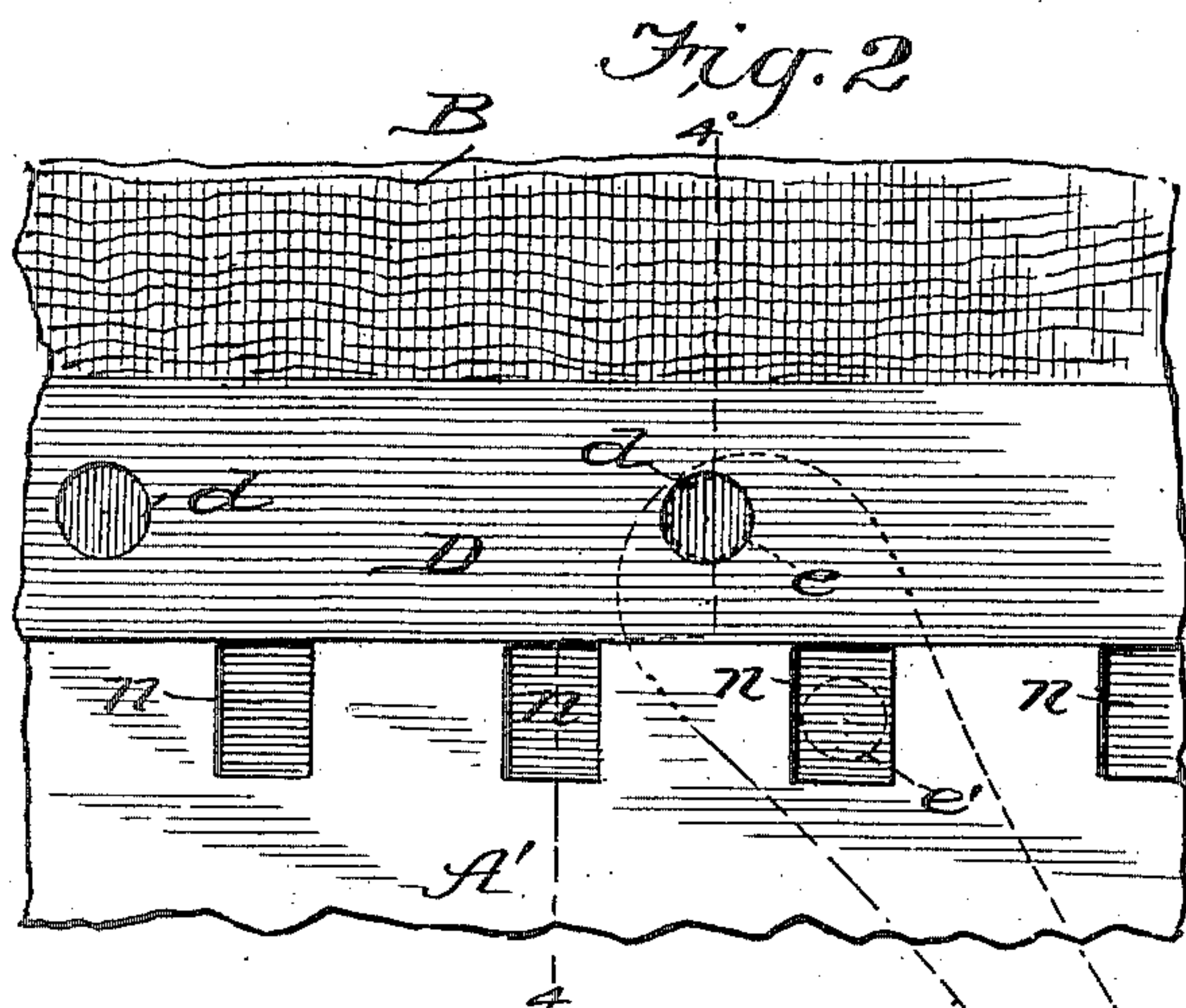
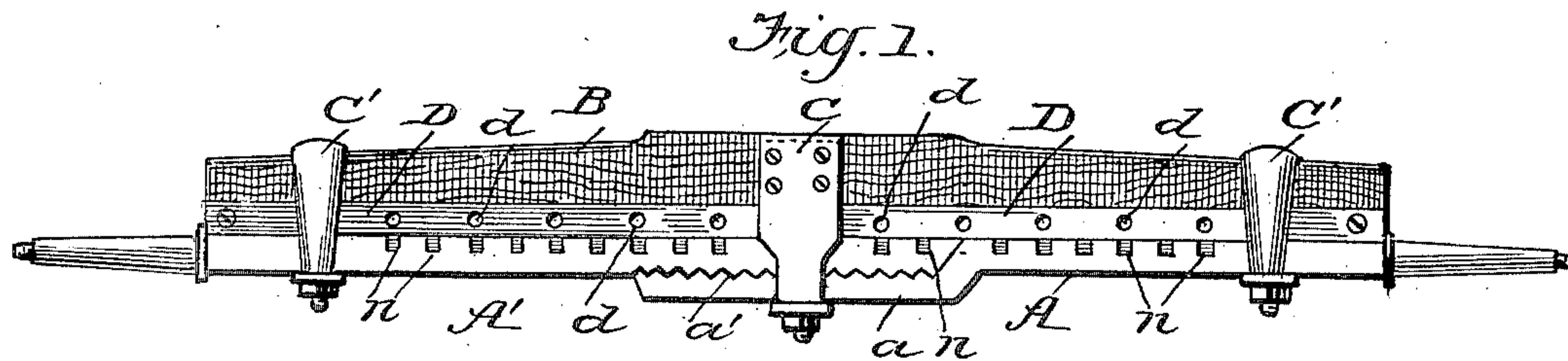


Fig. 4.

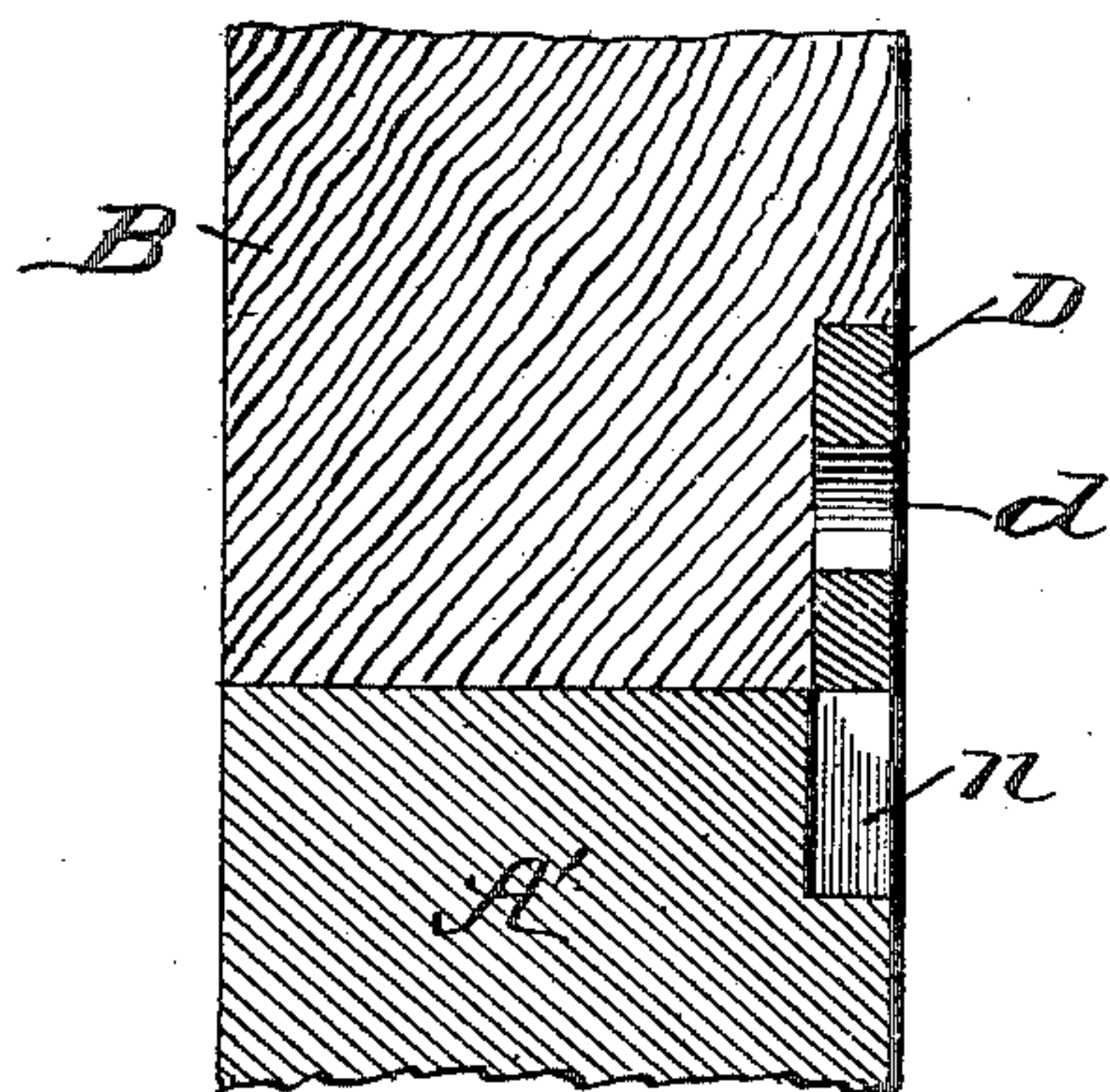
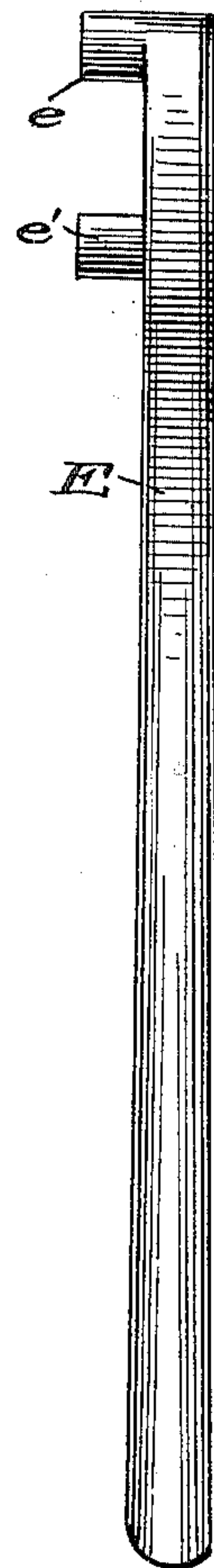


Fig. 3.



WITNESSES:

Jos. A. Ryan
Edw. W. Ryan.

INVENTOR

Perley W. Carney.
BY Munn & Co.

ATTORNEYS

UNITED STATES PATENT OFFICE.

PERLEY W. CARNEY, OF PORTSMOUTH, VIRGINIA.

EXTENSIBLE AXLE.

SPECIFICATION forming part of Letters Patent No. 668,091, dated February 12, 1901.

Application filed June 30, 1900. Serial No. 22,190. (No model.)

To all whom it may concern:

Be it known that I, PERLEY W. CARNEY, of Portsmouth, in the county of Norfolk and State of Virginia, have invented a new and useful Improvement in Extensible Axles, of which the following is a specification.

My invention relates to extensible axles for vehicles designed to enable the wheels to be set farther apart or closer together to adjust them to pass between the rows of growing crops without mashing down the rows or hills. As the various crops have different intervals of space between the rows or hills, a width between the rows of one crop does not correspond to the width between others, and hence the desirability of a vehicle which can be adjusted to the various spacing of rows.

My invention consists in convenient and practical means for making the adjustment, as will be hereinafter fully described with reference to the drawings, in which—

Figure 1 is a side view of an axle constructed in accordance with my invention. Fig. 2 is an enlarged detail view of a portion of the axle, showing in dotted lines the application of a special tool for changing the adjustment. Fig. 3 is a side view of the tool, and Fig. 4 is a cross-section of the axle.

In the drawings, B is the wooden bolster, and A A' the two sections of the extensible axle, which are made of iron or steel, with spindle-arms at their outer ends to receive the wheels. One of the axle-sections, A, is at its inner end offset at *a* the distance of the thickness of the axle, so as to bring the section A' in alinement with A and both of them flat against the bottom of the bolster, with the inner ends of the axle-sections overlapping. The adjacent faces of the two axle-sections are serrated at *a'*, so as to intermesh and form a rigid connection between the two when both are inclosed within a steel yoke C, which is screwed or bolted to the bolster B and has at its lower ends screw-stems, with nuts on them binding against a cross-plate to hold the two sections of the axle together and firmly to the bolster. Near the outer ends of the axle-sections similar clips or yokes C' C' are employed to hold the outer ends of the axle and bolster. Along the lower edge of the bolster there is attached by suitable

screws or bolts a longitudinal fulcrum-strip D, of metal, having a number of holes *d* in the same. The edges of the two sections of the axles which adjoin the strip D are formed with a series of notches *n*. The notches *n* of the axle and the holes *d* of the fulcrum-strip form seats which are adapted to receive the bearings *e e'* of a special form of tool E, which is employed to adjust the axle-sections over each other.

When the weight of the wagon is on the axle and the two sections of the latter are stuck fast by rust and adhesions of dirt, it is a difficult matter to move one section of the axle over the other, even after the clamping-yokes are loosened. My invention is designed to provide for this difficulty, and for this purpose the metal strip D, with its holes or sockets *d*, form fulcrum-seats that coöperate with the notches *n* of the axle, acting as bearings to allow a powerful leverage to be exerted by a long-handled tool E. The latter is applied as shown in dotted lines in Fig. 2. The upper lug or stud *e* of the tool is inserted in one of the fulcrum-holes *d* and the lower lug or stud *e'* in one of the notches *n* of the axle-sections. The clamping-yokes being loosened sufficiently to allow the serrations *a'* to pass each other, a strong movement of the handle of the tool, as indicated by the arrow, causes the axle-section A' to be moved in relation to the bolster and the other axle-section a sufficient distance to bring the wheels to a proper gage.

To facilitate their adjustment, the notches *n* are preferably formed at such spacings as to represent graduations in inches or fractions of an inch, so that the movement of a certain number of notches will indicate a definite measurement in inches.

I am aware that extensible axles made in two sections have heretofore been made, and I do not claim this broadly.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. A vehicle-axle comprising a bolster having along its edge a strip of metal provided with fulcrum seats or sockets, and two metal axle-sections provided with bearing-notches for a tool along their edges adjacent to the

fulcrum strip, and clamping yokes or clips for clamping the parts together substantially as described.

2. A vehicle-axle comprising a bolster having along its edge a strip of metal provided with fulcrum seats or sockets, two axle-sections one of which is offset at its inner end and lapped past the other, the adjacent faces being serrated, and both sections having notches formed along their edges, and clips or yokes securing the two sections to the bolster substantially as shown and described.

3. In an extensible axle the combination

with a bolster, of two axle-sections lapped past each other in the middle and having serrated adjacent edges and a central clip or yoke embracing both the bolster and the two axle-sections substantially as described.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

PERLEY W. CARNEY.

Witnesses:

T. E. DASHIELL,
JOSEPH F. MOORE.