

J. Poffenberger,

Pitman.

No. 102151.

Patented Apr. 19. 1870.

Fig. 1.

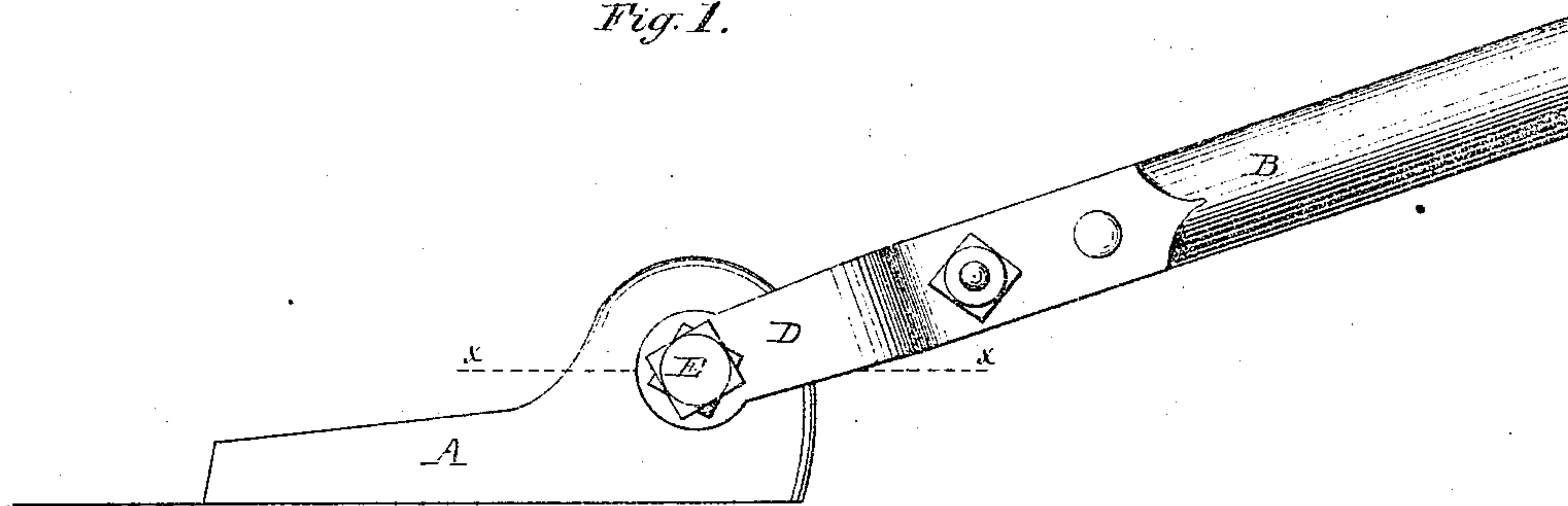


Fig. 2.

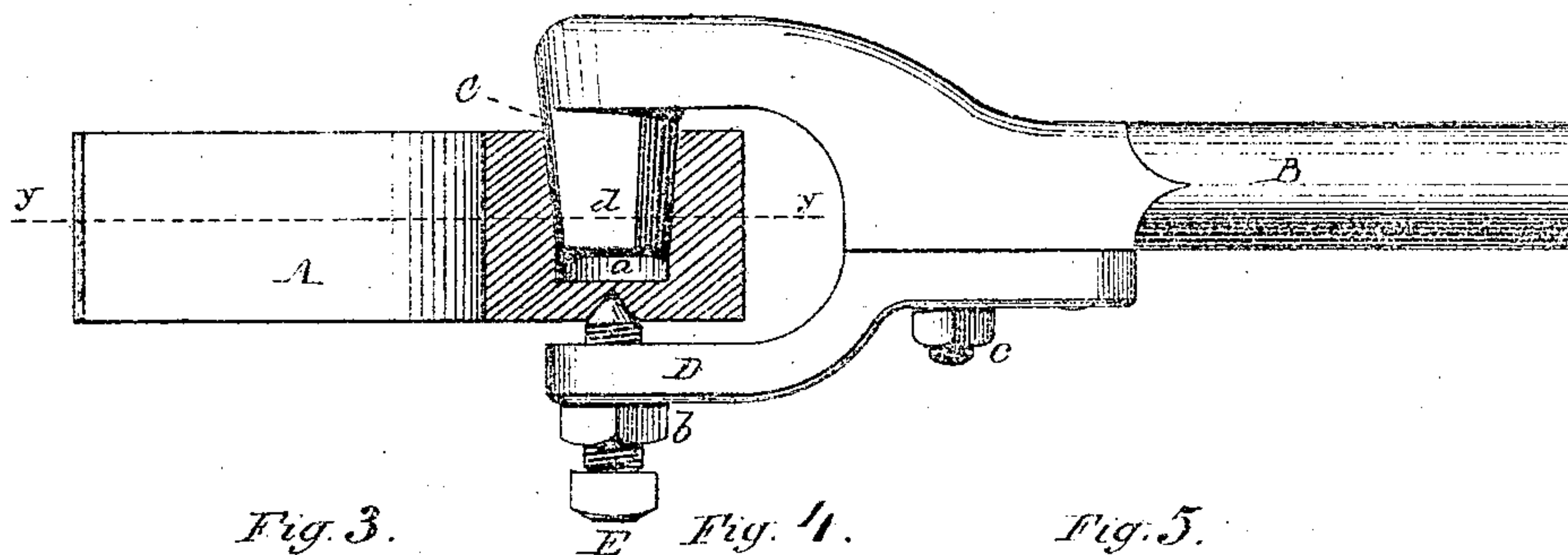


Fig. 3.

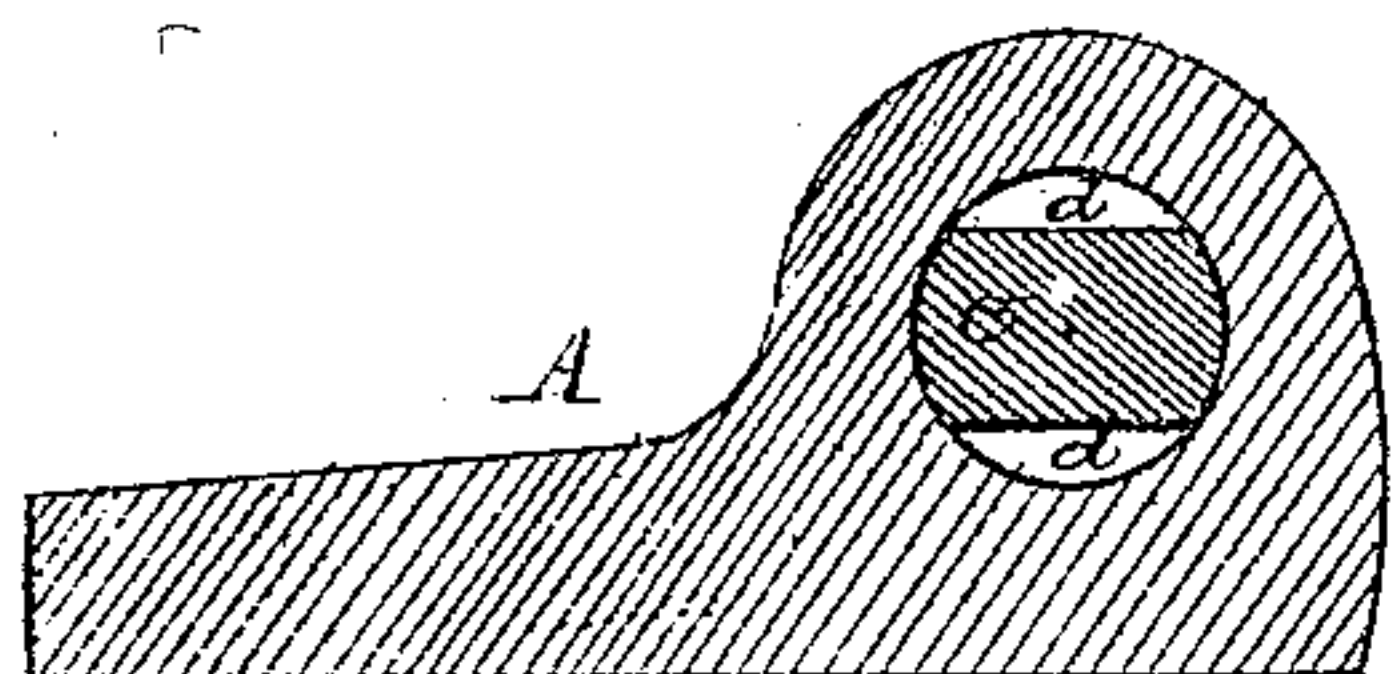


Fig. 4.

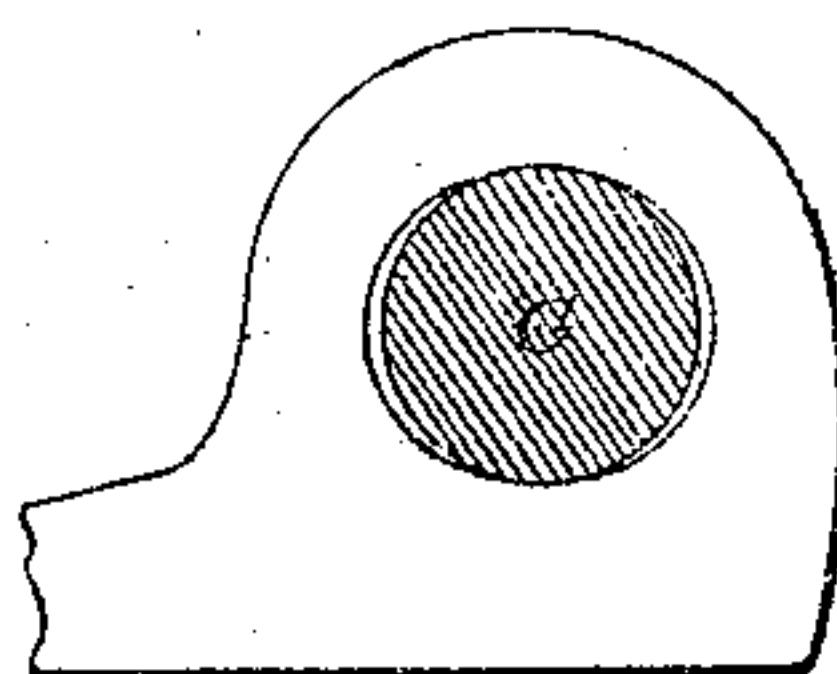
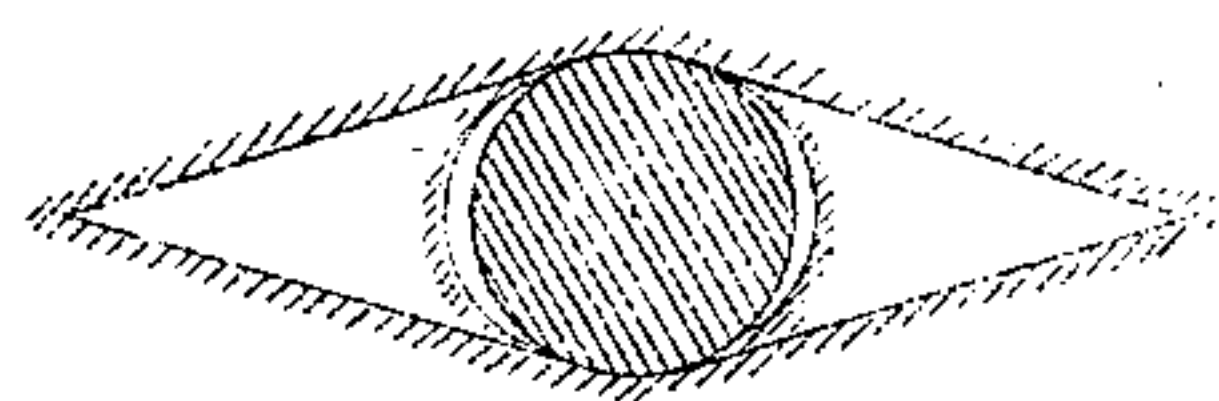


Fig. 5.



Witnesses:

L. Hailer

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Inventor

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IVA POFFENBERGER, OF CHAMPAIGN COUNTY, OHIO.

Letters Patent No. 102,151, dated April 19, 1870.

IMPROVED JOINT FOR PITMAN-HEADS, SICKLES OF HARVESTERS, &c.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, IVA POFFENBERGER, of the county of Champaign and State of Ohio, have invented certain Improvements in Joints for Pitman-Heads and Sickles of Harvesters, &c., of which the following is a specification, reference being had to the accompanying drawings.

In harvester pitmans, as heretofore constructed, the wrists have been made of either a cylindrical or a conical form, and arranged to work in a correspondingly-shaped hole or seat in the sickle-head, but when of either form, as the wrist and its seat wore away, the wrist became loose, and rattled back and forth within the seat, greatly to the injury of the driving mechanism and the annoyance of the operator.

As a result of the peculiar movement of the pitman, this wear is almost entirely upon the front and rear sides of the wrist and its seat, and thus the seat is elongated horizontally and the wrist flattened, while both remain of nearly the original diameter vertically. When the cylindrical wrist was used, this wear could only be compensated for by bushing or renewing the parts, but when the taper or conical wrist was adopted, it was supposed that the joint could be tightened and play prevented by setting the wrist further into its seat. In practice, however, it has been found that, as the wrist and seat wear only upon the two sides, the two remaining sides prevent the wrist entering further into the seat, and thus it cannot be tightened so as to prevent longitudinal play.

My invention has for its object to produce a joint which may always be kept tight, so as not to play or rattle; and

It consists in providing a taper-wrist, flattened upon its upper and lower sides, and inserting it into a conical seat; and also in providing the pitman with a spring and set-screw, by which the wrist is held firmly to its seat.

In the drawings—

Figure 1 is a side elevation of my joint;

Figure 2, a section of the same on the line *x x* of fig. 1;

Figure 3 is a longitudinal vertical section of the same on the line *y y* of fig. 2; and

Figures 4 and 5 are views of the old style of wrist, showing the peculiar manner in which they wear away.

A is the sickle-head, made in the usual manner,

and provided with a conical hole or seat, *a*, entering from one side, and extending nearly through it.

B is the pitman, having its end bent or off-set, and the wrist C formed upon it, as shown.

The wrist C I make of a size and taper corresponding to the seat *a*, and cut away or flatten its upper and lower sides, as shown at *d d*, figs. 2 and 3, and then insert it within the seat, as shown in fig. 2.

To the side of the pitman I secure a spring-arm, D, and through the end of this arm, in line with the axis of the wrist, I pass a screw, E, which bears against or in the back side of the head A, as shown in figs. 1 and 2, so as to hold the wrist snugly to its place.

The screw E I provide with a lock-nut, *b*, by which it is prevented from jarring loose or unscrewing as the pitman vibrates.

In using my joint, I turn the screw E until it causes a slight tension upon the spring arm, and then turn up the lock or jamb nut to hold it, so that, as the wrist and seat wear by action, the spring-arm will draw the wrist deeper into the seat, so as to fit snugly, and thus prevent play or rattle of the parts.

Instead of flattening the wrist, it is obvious that the same result may be produced by making the wrist conical, and the seat of a corresponding taper, but elongated vertically, or, in other words, of an elliptical form in cross section, the principle and mode of operation being the same.

By this method of construction it will be seen that, as the front and rear sides of the wrist or of the hole wear away, the wrist can be shoved in far enough to give a bearing at front and rear without binding at top and bottom, as otherwise would be the case.

Having thus described my invention,

What I claim is—

1. A pitman-joint, consisting of a conical hole, with a correspondingly conical wrist, flattened at its sides, substantially as described.

2. In combination with the joint above described, the spring arm D, attached to the pitman, and provided with the set-screw E, substantially as set forth.

IVA POFFENBERGER.

Witnesses:

THOS. H. HUMPHREYS,
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