C. E. TOWNLEY.

PITMAN CONNECTION.

APPLICATION FILED NOV. 30, 1908.

918,225. Patented Apr. 13, 1909.

Fig. 1.

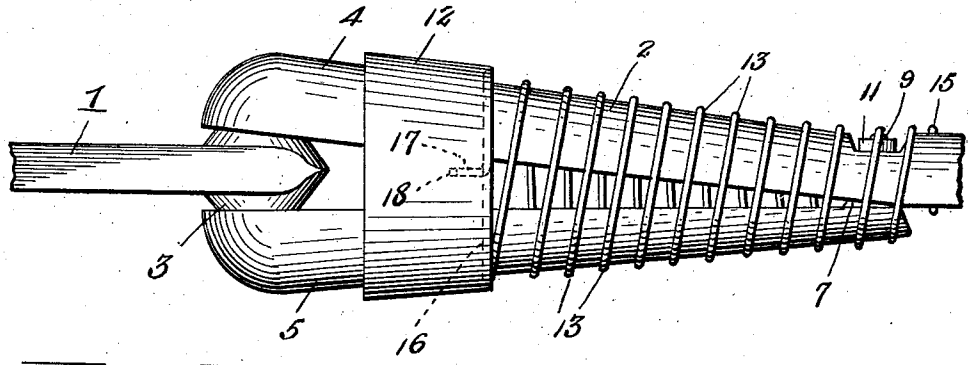


Fig. 2.

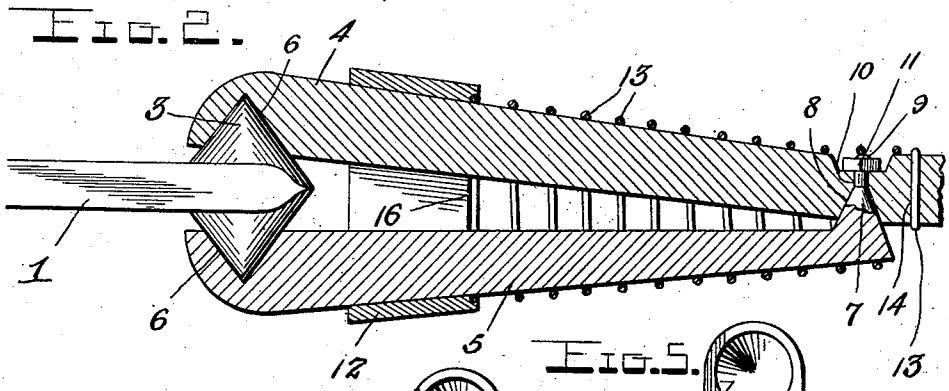


Fig. 3.

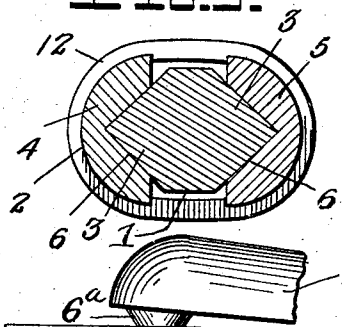


Fig. 5.

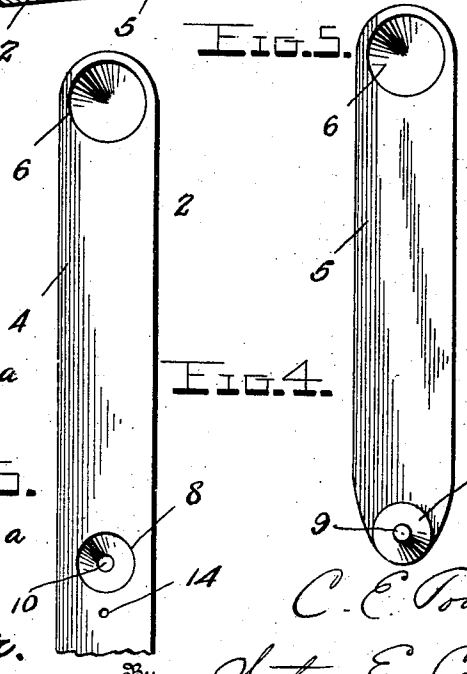
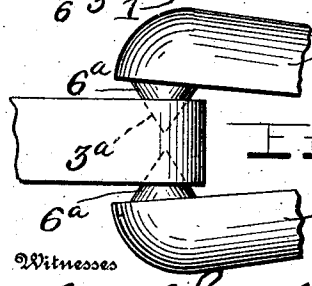


Fig. 4.

Fig. 6.



Witnesses

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PITMAN CONNECTION.

No. 918,225. Specification of Letters Patent. Patented April 13, 1909.

Application filed November 30, 1908. Serial No. 465,150.

To all whom it may concern:

Be it known that I, CHARLES E. TOWNLEY, a citizen of the United States, residing at Dryden, in the county of Tompkins and State of New York, have invented certain new and useful Improvements in Pitman Connections, of which the following is a specification, reference being had to the accompanying drawings.

This invention relates to improvements in joints or couplings such as used in pitmen for harvesting and mowing machines, thill couplers and the like.

The object of the invention is to provide a simple and practical joint of this character in which wear will be compensated for, lost motion prevented, friction reduced and consequently no loss of power and no noise or rattling.

With the above and other objects in view, the invention consists of the novel features of construction and the combination and arrangement of parts hereinafter fully described and claimed, and illustrated in the accompanying drawings, in which—

Figure 1 is a side elevation of the improved joint; Fig. 2 is a longitudinal section; Fig. 3 is a transverse section; Figs. 4 and 5 are detail views of the two jaws; and Fig. 6 is a detail side elevation showing a modified form.

In the drawings 1 and 2 denote two members which are connected by the improved compensating joint or coupling. The member 1 has formed at one end upon its opposite sides the pivot projections 3 which are preferably cone-shaped, as shown. The other member 2 is provided at its adjacent end with two similar jaws 4, 5, the former of which is formed integral with said member and provides a stationary jaw and the latter of which is pivotally or loosely connected so that the member 1 will be received between the two jaws. The flat opposing faces of said jaw members are formed adjacent to their outer ends with bearing recesses 6 shaped to fit the pivot projections 3, said recesses being of less depth than the length of said projections so that as the parts wear the two jaws may move toward each other to prevent lost motion or looseness. The pivotal connection of the movable jaw 5 is effected by forming at its inner end a cone-shaped bearing projection 7 adapted to enter a similar shaped bearing recess 8 formed in the inner face of the stationary jaw 4. The pivot projection 7 has at its apex a screw threaded stem 9 adapted to project through an opening 10 formed in the bottom of the recess 8, and to receive a nut 11 or any other means for holding the parts together.

The jaws 4, 5 are automatically forced toward each other by means of a collar or ring 12 which surrounds and slides upon the jaw members and is actuated outwardly by a coil spring 13. This spring has one of its ends fixed to the member 2 by being passed through a transverse opening 14 formed therein and then bent at right angles, as shown at 15. Its other end is seated in an annular groove 16 formed in the end of the collar 12 and its extremity is bent at right angles, as shown at 17, and set in a recess 18 formed in said collar. It will be noted upon reference to Figs. 1 and 2 of the drawings that the coil spring 13 tapers longitudinally and that a portion of its small end extends over the nut 11 so as to effectively retain it upon the threaded stem 9 and prevent it from working loose and dropping off.

In the modified form as shown in Fig. 6 the relation between the member 1^a and the jaw members 4^a and 5^a is reversed. The member 1^a has formed at one end upon its opposite sides cone-shaped bearing recesses 3^a. The flat opposing faces of the jaw members 4^a and 5^a are formed adjacent to their outer ends with cone-shaped pivot projections 6^a which are adapted to fit in the bearing recesses 3^a, as clearly shown in drawings.

From the foregoing it will be seen that my improved compensating joint or coupling is exceedingly simple in construction and may therefore be produced at a comparatively small cost and will be strong and durable. Its peculiar construction causes it to automatically take up all wear and thereby reduce friction and prevent lost motion, loss of power and noise and rattling of the parts of the joint. While the invention is particularly well adapted for use as a pitman connection for a mowing machine or the like, it may be used for a variety of analogous purposes.

Having thus described the invention what is claimed is:

A pitman connection comprising opposing longitudinally extending jaws having their outer faces inclined in diverging relation, one of said jaws being formed at its inner end with a transverse opening having at one end

a cone-shaped seat and at its other end an enlarged recess, the inner end of the other jaw having a cone-shaped pivot projection terminating in a screw threaded stem and adapted to be passed through said transverse opening, a nut upon the threaded stem and arranged in said recess, a collar surrounding said jaws and slidable thereon to actuate them toward each other and a longitudinally tapered coil spring surrounding the jaws and having one end engaged with the collar and its other end fixed to one of said jaws, a portion of said spring being adapted to extend over the nut to retain it upon the threaded stem.

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

CHARLES E. TOWNLEY.

Witnesses:
GEO. E. GOODRICH,
THERON JOHNSON.