

JOHN W. ZINN.

Improvement in Connecting Rod.

No. 122,095.

Patented Dec. 19, 1871.

FIG. 1.

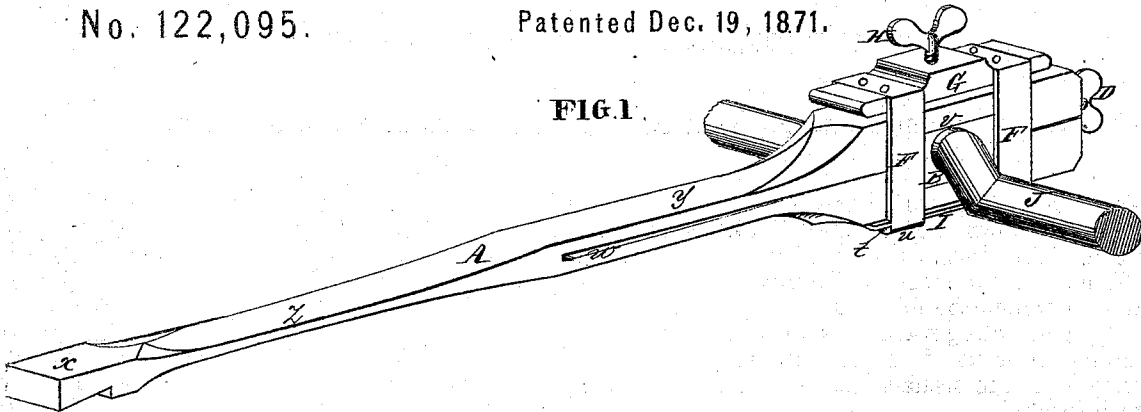


FIG. 2.

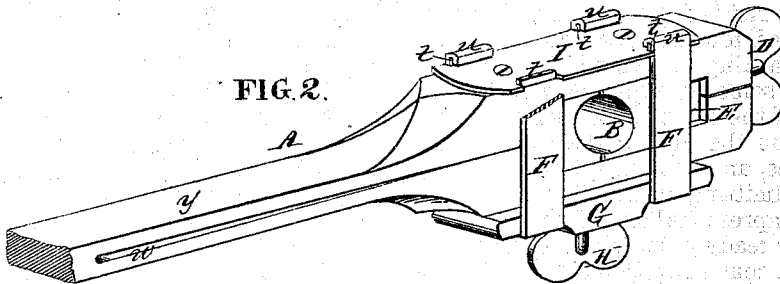


FIG. 3.

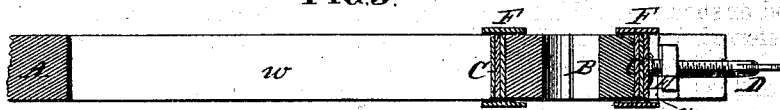
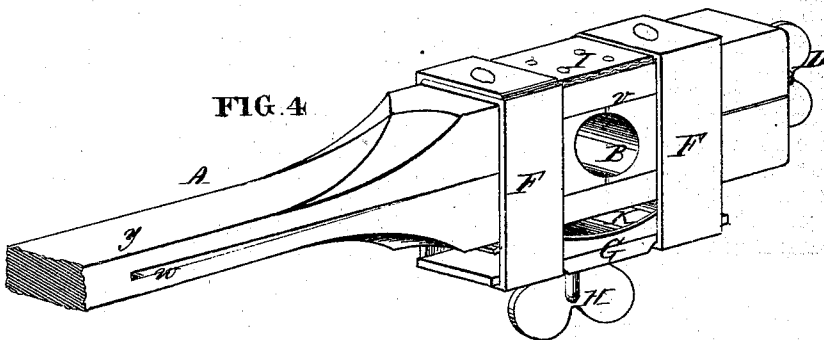


FIG. 4.



ATTEST.

Gas L. Swin
Walter Allen

INVENTOR.

John W. Zinn
By Knight Bros. Atty.

UNITED STATES PATENT OFFICE.

JOHN W. ZINN, OF MORRISON'S MILLS, FLORIDA.

IMPROVEMENT IN CONNECTING-RODS.

Specification forming part of Letters Patent No. 122,095, dated December 19, 1871.

To all whom it may concern:

Be it known that I, JOHN W. ZINN, of Morrison's Mills, in the county of Alachua, State of Florida, have invented an Improved Connecting-Rod, of which the following is a specification:

My connecting-rod or shackle-bar is primarily intended for use in cotton-gins to connect the stripper to the crank-shaft by which the same is reciprocated.

The rod is of wood and has a split end to receive the crank-wrist and its box. An elongated space is provided for the latter, and leather or other suitable packing in layers is introduced at each end of the same, by adjusting which the effective length of the rod may be varied. A set-screw entering at the end of the rod, a pair of transverse yokes, an abutment-plate and a side clamp-screw, admitting of modification, retain and properly compress the box and packing while permitting their ready adjustment or renewal.

The invention consists in the said combination of clamping and retaining devices; also, in making such wooden connecting-rod with two springs.

Figure 1 is a perspective view of a cotton-gin connecting-rod or shackle-bar illustrating my invention in preferred form. Fig. 2 is a like view on a larger scale and partly in section of the same inverted. Fig. 3 is a longitudinal section of the same. Fig. 4 is a view similar to Fig. 2 of a modified form of the device.

Like reference-letters indicate corresponding parts in the several figures.

A represents a wooden rod constructed with two springs, *z y*, an end, *x*, adapted for attachment to the stripper of a cotton-gin, and a slit, *w*, and recess *v*, in its other end to adapt it to receive a crank-box, B, packing C, a longitudinal clamp-screw, D, and a nut, E, therefor, as represented. F F are transverse yokes; G, an abutment-plate, supported thereby; and H, a clamp-screw passing through the said abutment-plate to draw the parts of the rod together. I represents a plate attached to the back of the rod for the yokes F to engage with. J, Fig. 1, represents a portion of a crank-shaft. The box B is made

in two or more parts, of hard wood or other suitable material. The packing C is in plates or layers, and may be leather, rawhide, or other more or less elastic substance. By shifting a part of the packing from one side to the other of the box the rod is adjusted as required. The yokes F serve in addition to their primary function to retain this packing, being made broad and flat for this purpose. They may be open and provided with hooks *u* on their ends to engage with ledges *t* on the back plate I, and resilient, so as to disengage automatically, as represented in Figs. 1 and 2, or closed, as represented in Fig. 4. The back plate I would, in the latter case, serve simply to hold the ends of the yoke at proper distance apart, and might be made of leather. The abutment-plate G may be of wood or metal and attached to or separate from the yokes F. The clamp-screw H may bear directly on the rod, as in the example illustrated in Figs. 1, 2, and 3, or through a spring, K, as illustrated in Fig. 4, and may be provided with a jam-nut (not shown) if deemed necessary. The two springs *z y* in the rod or bar A are arranged one, *z*, about one-fourth the distance from the top *x*, the other, *y*, about one-third from the lower end.

As thus arranged they give the rod the greatest amount of elasticity consistent with proper strength, and adapt a given weight of rod to stand twice the strain one of ordinary construction would endure.

I claim as new and of my invention—

1. The combination of the yokes F, abutment-plate G, clamp-screw H, and back plate I with the slitted and recessed rod A *w v*, the box B, packing C, and screw D, and nut E for clamping the said packing, as shown and described, for the purposes set forth.

2. The wooden rod or bar A, constructed with two springs, *z y*, arranged as shown, for the purposes specified.

JOHN W. ZINN.

Witnesses:

F. E. HALE,
JAMES L. MILLER.

(67)