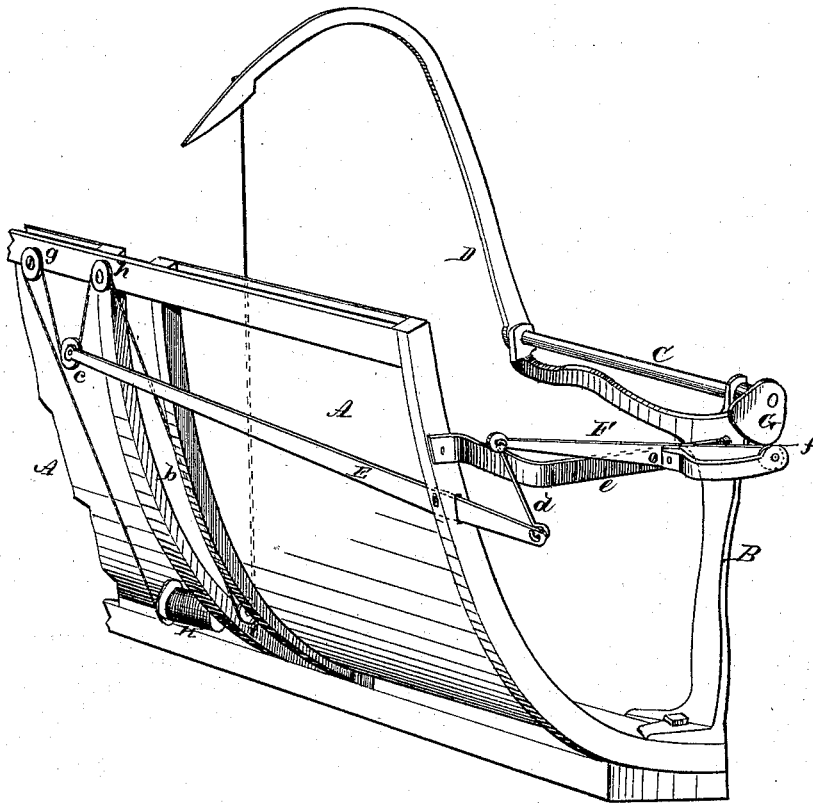


T. H. PARVIN.
Lever Take-Up for Grain-Binders.

No. 198,040.

Patented Dec. 11, 1877.



WITNESSES:

Chas. Nida
J. H. Scarborough

INVENTOR:

T. H. Parvin

BY *Mumford*

ATTORNEYS.

UNITED STATES PATENT OFFICE.

THOMAS H. PARVIN, OF CHICAGO, ILLINOIS.

IMPROVEMENT IN LEVER TAKE-UPS FOR GRAIN-BINDERS.

Specification forming part of Letters Patent No. **198,040**, dated December 11, 1877; application filed October 6, 1877.

To all whom it may concern:

Be it known that I, THOMAS H. PARVIN, of Chicago, in the county of Cook and State of Illinois, have invented a new and Improved Geared-Lever Take-Up for Self-Binding Harvesters, of which the following is a specification:

The object of my invention is to provide a take-up for self-binding harvesters, for taking up slack in the wire or cord used in binding, which shall give a varied or uniform tension on the wire or cord, as desired.

The invention consists in a lever carrying a sheave, which acts upon the wire or cord, the said lever being connected with another lever that is moved by a cam on the main or other shaft of the binding apparatus.

Referring to the drawing, which is a perspective view of a portion of a harvester or binder, A is the apron which contains the bundle to be bound, and B is a standard which supports the shaft C, that carries the binder-arm D.

In the apron A there is a slot, *b*, through which the wire is drawn by the binder-arm as it is carried around the bundle.

Upon the under side of the apron A a lever, E, is pivoted, which carries at the end of its longer arm a sheave, *c*, and its shorter arm is connected, by a short connecting-rod, *d*, with a lever, F, which is pivoted to a bar, *e*, that extends from the standard B to the upper edge of the apron A.

The shorter arm of the lever F is forked, and carries a roller, *f*, which is engaged by the heart-shaped cam G on the shaft C.

Sheaves *g h* are placed at the back of the apron A, and a sheave, *i*, is placed in the slot *b*, on a stud that projects from the apron at one side of the slot.

The cord or wire used in binding the sheaves is carried by a spool, H, under the apron A, and extends upward over the sheave *g*, thence downward under the sheave *c*, carried by the lever E, thence upward over the sheave *h* and downward under the sheave *i*, after which it is taken by the tying mechanism carried by the arm D.

As the binder-arm D rotates it carries the cord or wire around the bundle, and a uniform or varied tension is maintained by the action of the lever E, as its motion adapts itself to the movement of the binder-arm. It moves with a positive motion, and does not remove the wire or cord from the spool except as it is required to encircle the sheaf.

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

The combination of the levers F E, cam G, sheaves *g h i*, substantially as and for the purpose herein shown and described.

THOMAS HENRY PARVIN.

Witnesses:

W. F. WALMSLEY,
JOHN M. JOHNSTON.