(No Model.) 2 Sheets—Sheet 1.

G. W. HEENE.

WORKMAN'S TIME RECORDER.

No. 491,557. Patented Feb. 14, 1893.

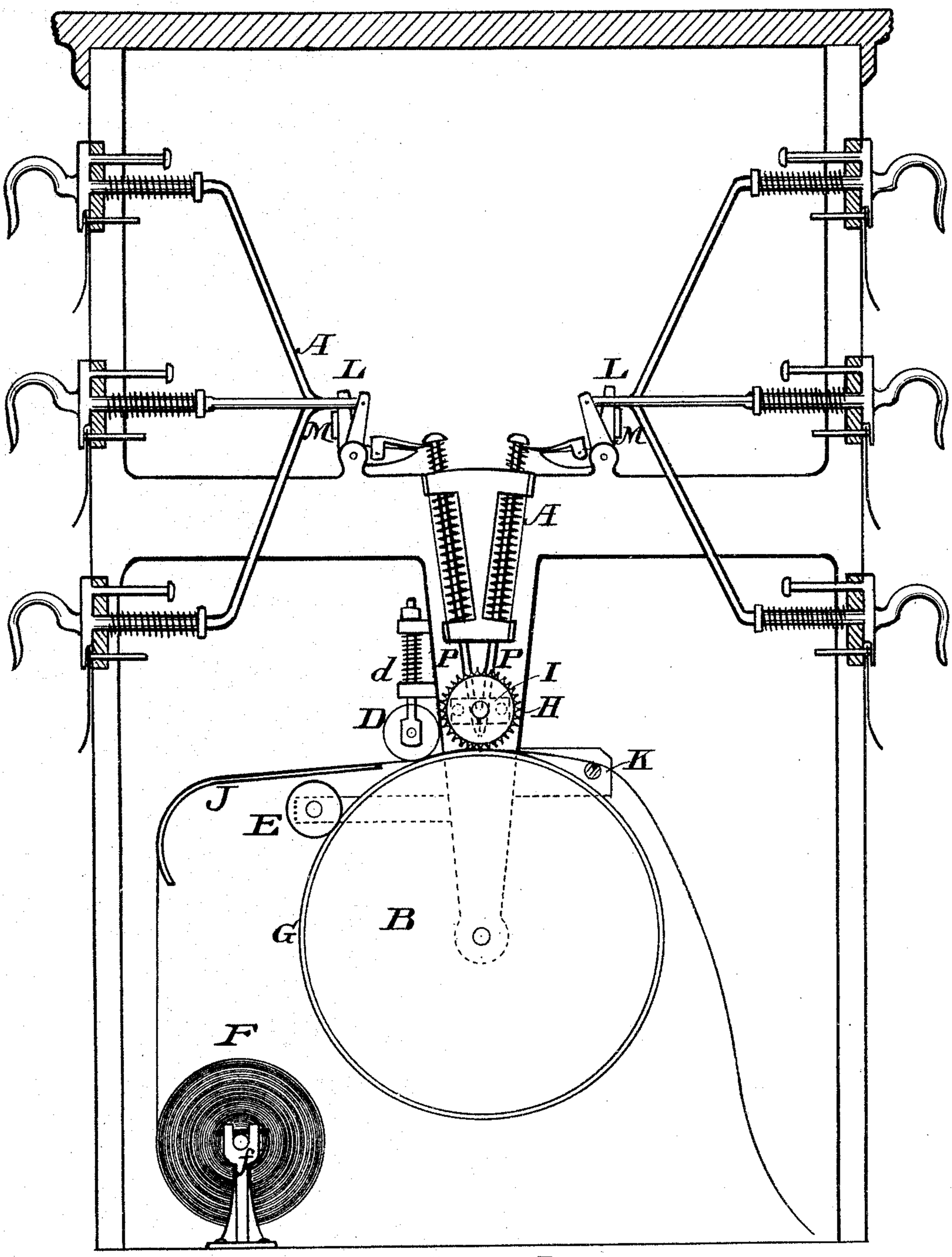

Fig. 1.

Witnesses,
M. L. Morton.
W. H. Nurtad?

Inventor,
George W. Heene,
by Geo. W. Tibbitts atty.

(No Model.) 2 Sheets—Sheet 2.

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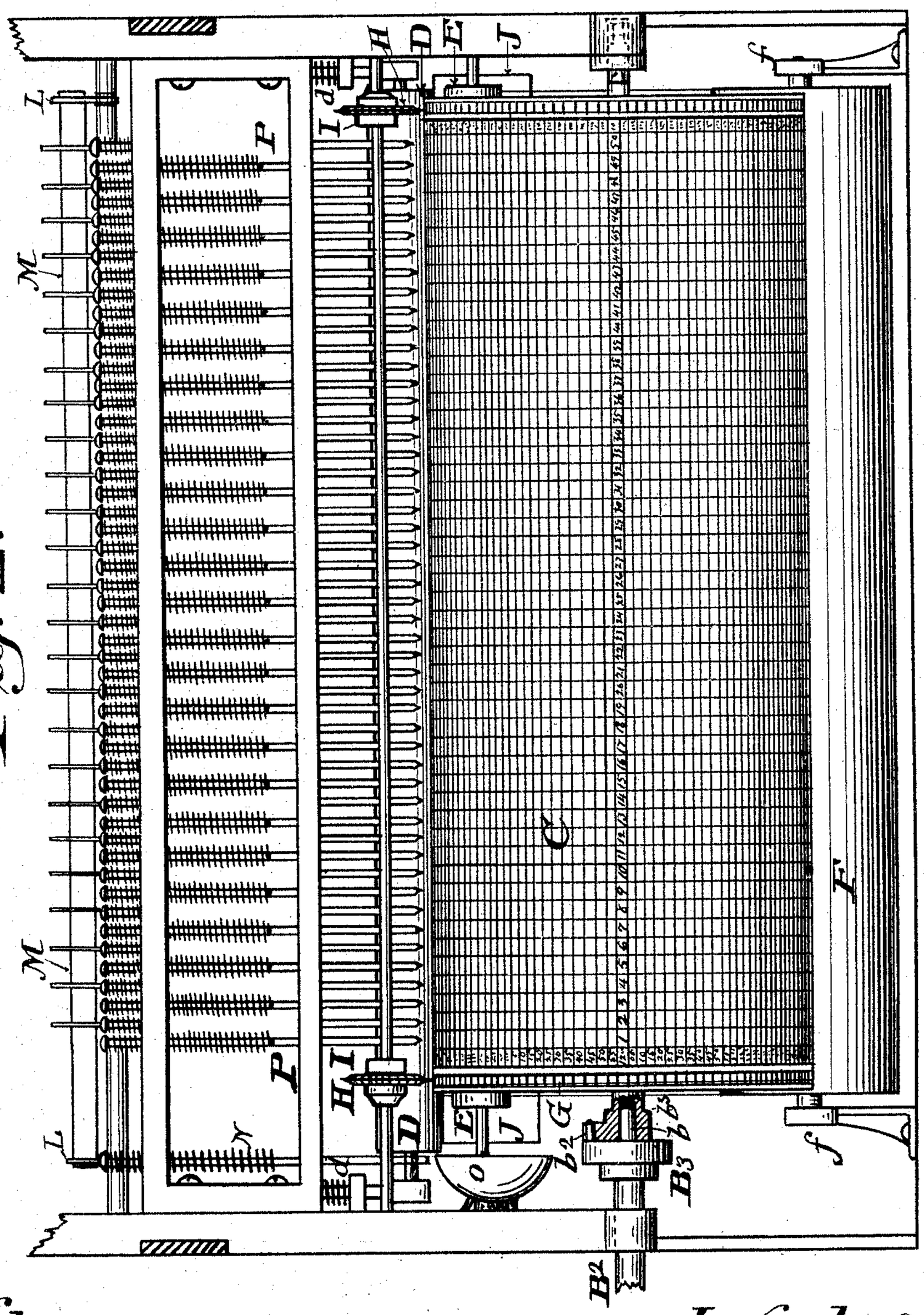

Fig. 2.

Witnesses
M. L. Norton.
W. H. Newton

Inventor;
George W. Heene,
by Geo. W. Tibbitts atty

UNITED STATES PATENT OFFICE.

GEORGE W. HEENE, OF CLEVELAND, OHIO.

WORKMAN'S TIME-RECORDER.

SPECIFICATION forming part of Letters Patent No. 491,557, dated February 14, 1893.

Application filed August 1, 1892. Serial No. 441,894. (No model.)

To all whom it may concern:

Be it known that I, GEORGE W. HEENE, a citizen of the United States, residing at Cleveland, county of Cuyahoga, and State of Ohio, have invented certain new and useful Improvements in Workmen's Time-Recorders, of which the following is a specification.

This invention relates to a device for self-recording the time of entry and departure of workmen or employés in factories, &c., and consists of additional improvements on my patents Nos. 451,398 and 461,478.

The invention consists of a mechanism constructed and arranged for printing and feeding a time chart in combination with a recording mechanism, said printing and feeding being performed by and in unison with a time clock, substantially as hereinafter described and pointed out in the claim.

In the accompanying drawings—Figure 1, Sheet 1, is a cross sectional view of the machine showing portions of the recording mechanism, and particularly the chart printing and conveying mechanism. Fig. 2, Sheet 2, is a longitudinal section of the same, showing the surface of the chart printing cylinder in its relation with the recording mechanism.

A A represent the recording mechanism contained in the aforesaid patents and are introduced here to show the co-operation of the same with my new mechanism, described as follows:

B is a cylinder or roller journaled in the framework of the main supporting frame, and is located directly under the punches P. Its journals are removably set in its bearings, the journal at one end is set in a bearing against a spring yielding center point. The bearing at the other and operating end having a clutch for accurately adjusting the position of printing cylinder with the clockwork shaft B^2, consisting of a disk B^3, having a center pin *b*, and a guide pin b^2. On the end of the cylinder shaft is a head b^3, having a center hole to receive the center pin *b*, and a slot at one side to receive the guide pin b^2, this enables the printing cylinder to be quickly and accurately placed in proper position relative to the clockwork.

Upon the cylinder B is provided a chart printing plate C, from which the time chart is printed upon blank paper as it is fed or conveyed over said cylinder a little in advance of the recording punches, the purpose of which is to insure accuracy between the printing and the recording on the chart.

D is an impression roller fixed in spring bearings *d d*, which presses the paper upon the printing surface of the cylinder a little in advance of the punches.

E is an inking roller supported in suitable bearings, for inking the printing surface of the cylinder.

F is a roll of blank paper supported in suitable bearings *f f* at one side of the printing cylinder, from which paper is drawn and conveyed to and over the said cylinder by means as follows: The ends of the cylinder B are provided with notched rims G G, and over said rims are provided toothed wheels H H, loosely set to turn on journals at the ends of a frame I, between the side bars of which the punches have their movements, the ends of said frame I being supported in the main framework and holding the said wheels H H, directly of the center of the cylinder, the rotations of which, aided by the said toothed wheels, accurately convey the paper, just printed under the punches.

J is a shelf over which the paper is carried and directed in a straight line to the printing surface of the cylinder.

K is a rod or bar supported just over the cylinder and over which the paper passes after the record has been made, the end hanging loosely. In the upper surface of the said rod or bar is made a longitudinal groove in connection with which a rotary cutter or knife may be used for severing the paper having the printed record, at the close of a day or at such times as desired.

L L are levers fulcrumed on the same supports as the punch actuating levers are, and are joined by bars M M, which lie along side of the said punch actuating levers, and are provided with pawls like said levers.

N N, are punch pins just like the punches, P, but have blunt ends and are designed for striking a gong O, the purpose of which is to

provide for sounding the gong as a signal, at each and every pull of the punch actuating levers.

Having described my invention—I claim.

In a workman's time recorder a chart printing cylinder B rotated in unison with and by a clock, feed wheels H H journaled over and adapted to convey paper over said cylinder; a spring bearing impression roller D, an inking roller E in combination with punch mechanism substantially as described and for the purpose set forth.

GEORGE W. HEENE.

Witnesses:

GEO. W. TIBBITTS,

JAS. B. PASKINS.