

J. HREN.
AUTOMATIC PAPER FEEDER.
APPLICATION FILED SEPT. 8, 1909.

951,074.

Patented Mar. 1, 1910.
3 SHEETS—SHEET 1.

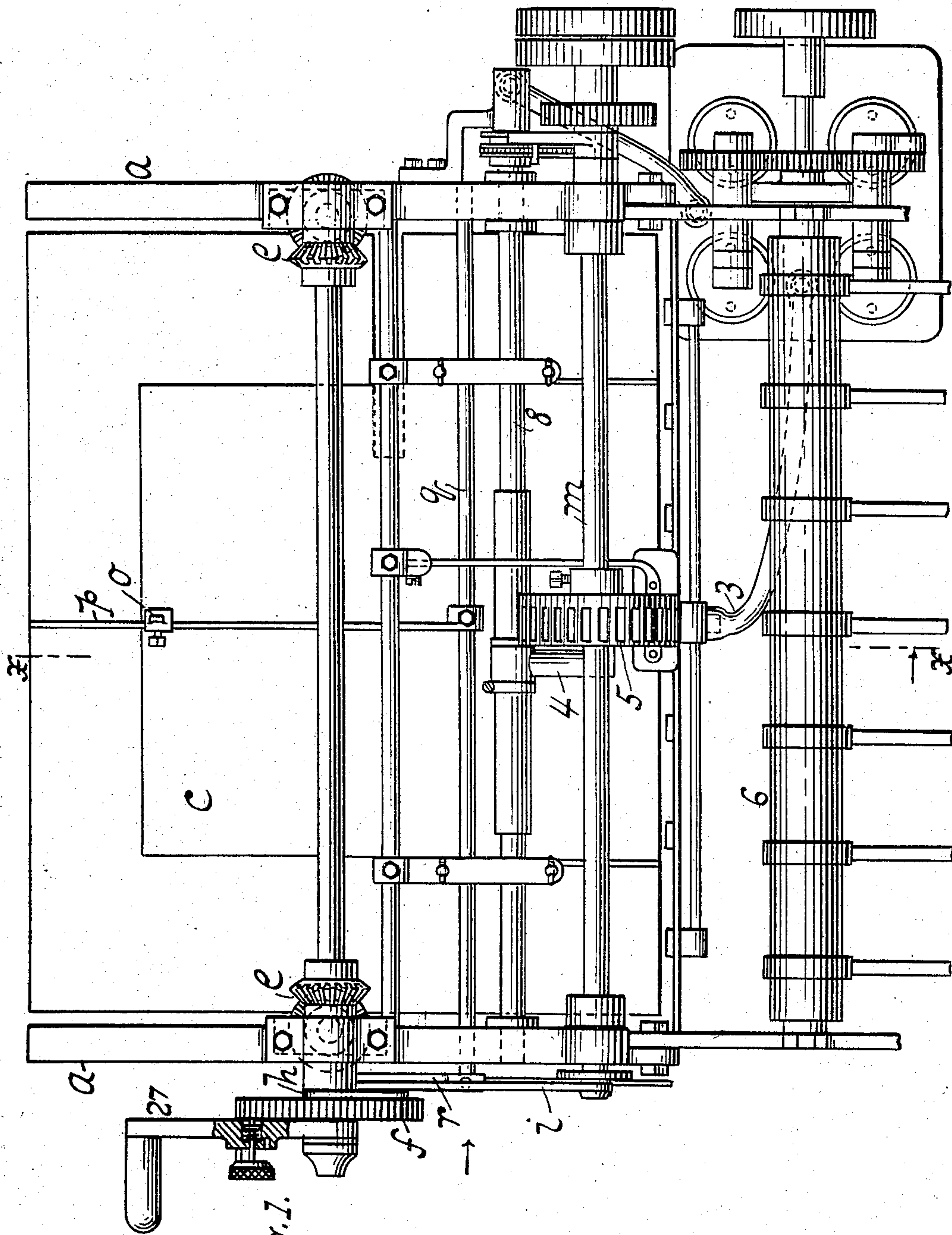


Fig. 1.

Witnesses:
William Miller
Christian Almstaedt

Inventor
Joseph Hren
By his Attorneys
Haufler - Marland

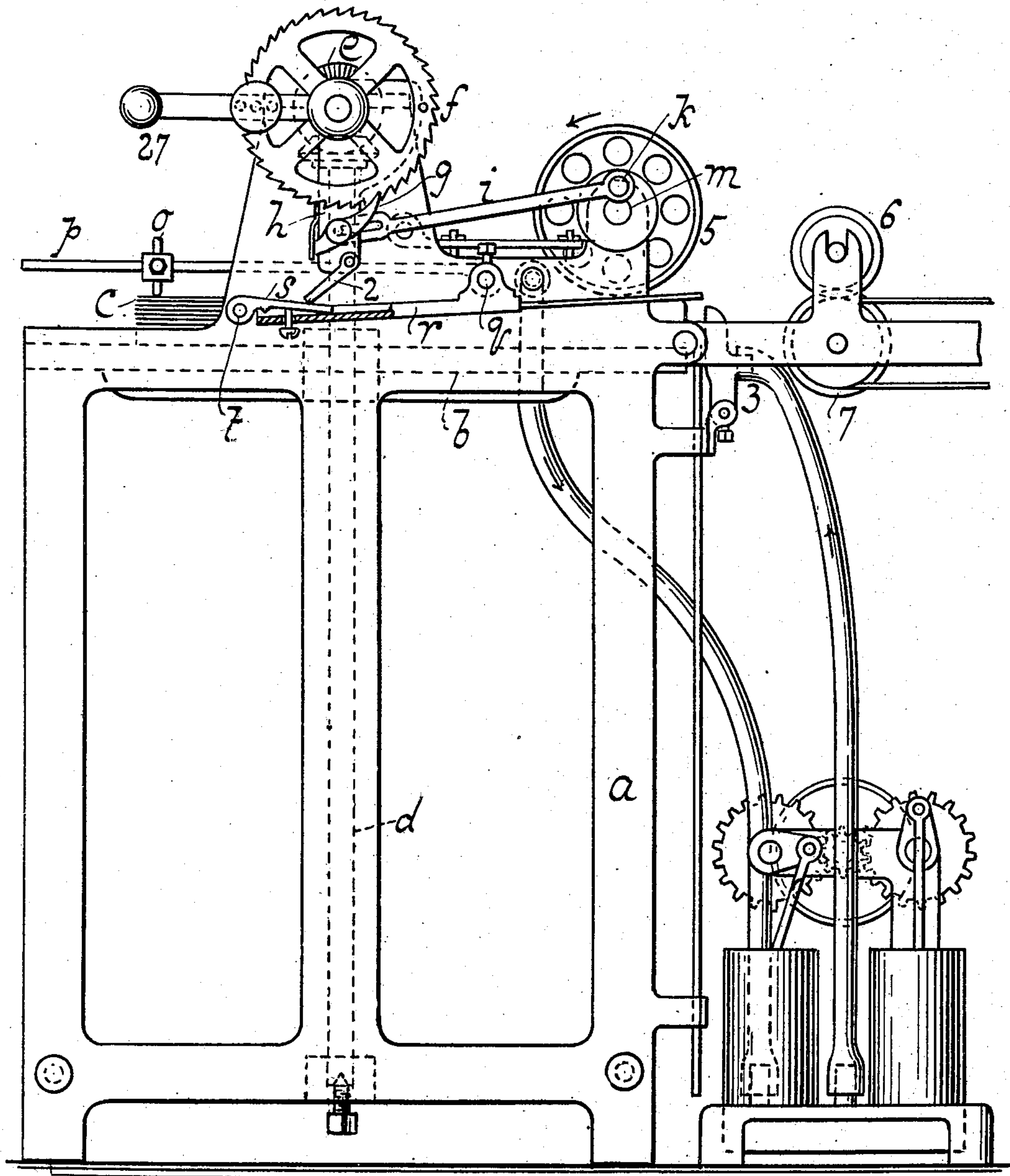
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3 SHEETS—SHEET 2.

Fig. 2.



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3 SHEETS—SHEET 3.

Fig. 3

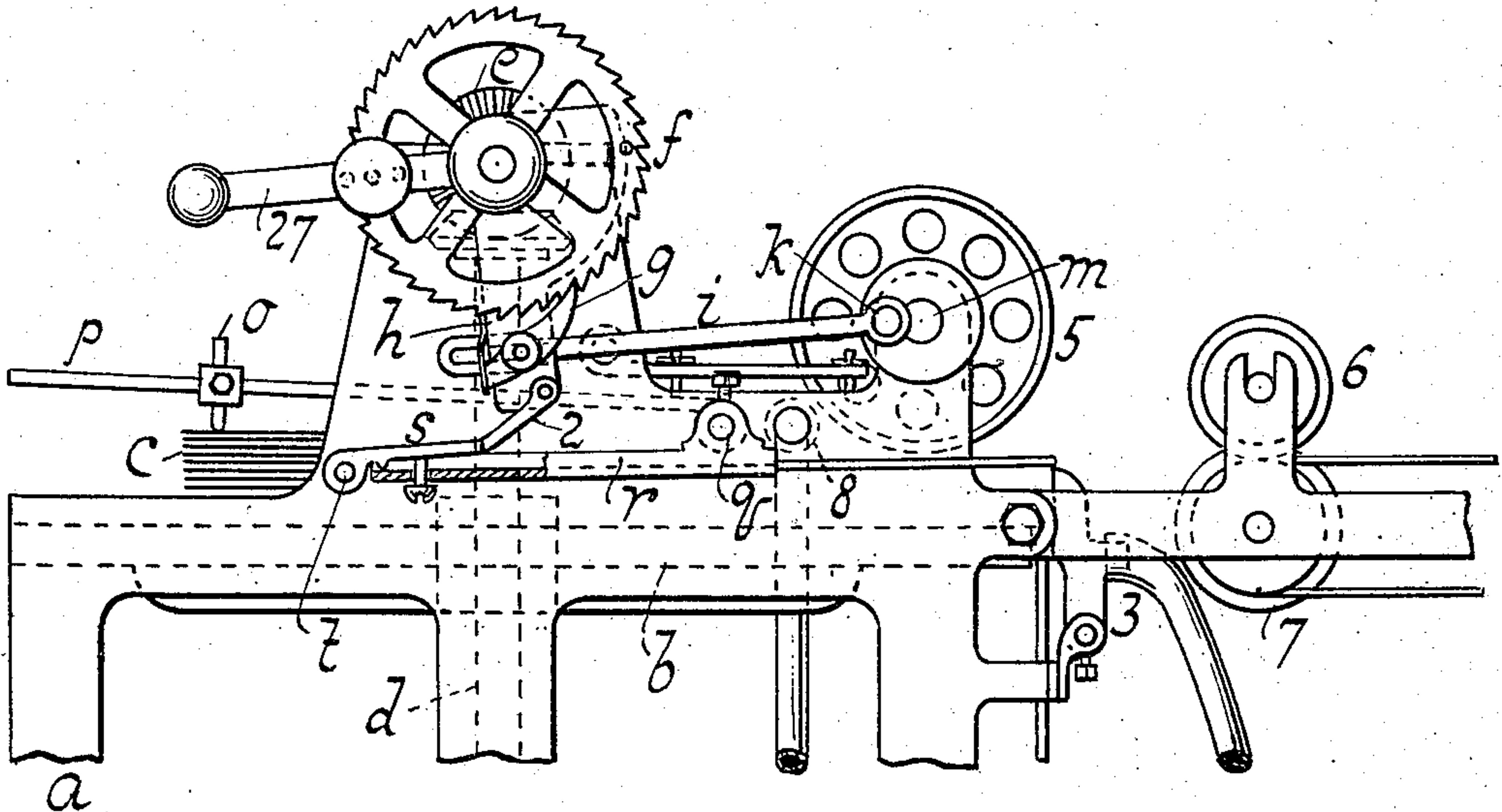
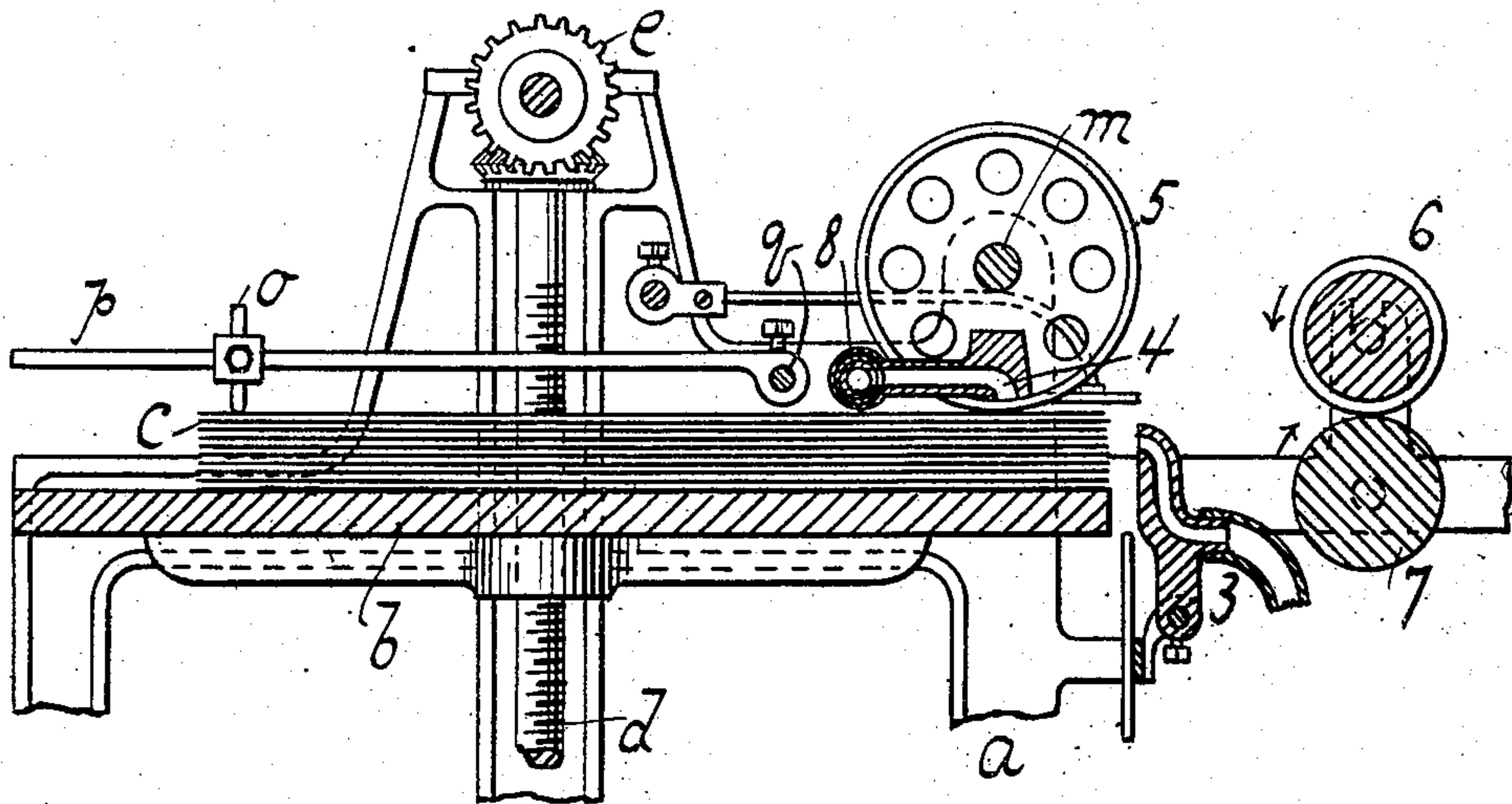


Fig. 4.



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UNITED STATES PATENT OFFICE.

JOSEPH HREN, OF BROOKLYN, NEW YORK.

AUTOMATIC PAPER-FEEDER.

951,074.

Specification of Letters Patent.

Patented Mar. 1, 1910.

Original application filed December 19, 1908, Serial No. 468,334. Divided and this application filed September 8, 1909. Serial No. 516,759.

To all whom it may concern:

Be it known that I, JOSEPH HREN, a citizen of the United States, residing at Brooklyn, in the county of New York and State of New York, have invented new and useful Improvements in Automatic Paper-Feeders, of which the following is a specification.

This invention relates to improvements in automatic paper feeders and a feature of the invention consists in means by which excessive feed of paper or sheets is automatically arrested.

Other features of the invention having been set forth in my application Ser. No. 468,334 of which the present application is a division need not be specifically mentioned herein.

This invention is set forth in the following specification and claim and illustrated in the annexed drawing in which:—

Figure 1 shows a plan view of a paper feeder embodying this invention. Fig. 2 shows a side elevation of Fig. 1, looking from the left. Fig. 3 shows a view of Fig. 1 looking from the left. Fig. 4 is a section along line *x-x* Fig. 1.

In this drawing the automatic paper feeder is shown comprising a frame or support *a* with a table *b* adapted to support a pile of sheets *c*. This table can be lifted by a screw stem *d* having miter gear connection *e* with ratchet wheel *f*. The ratchet wheel is actuated by a pawl *g* Fig. 2 pivoted on pawl arm *h* actuated by a link *i* and crank pin *k* on rotating shaft *m*. When the pile *c* rises beyond a certain level the finger *o* on lever *p* swings the latter and the rock shaft *q* to which it is secured, said rock shaft carrying an intermediate lever *r*. A stop lever *s* is pivoted at *t* and the free end of this stop *s* rests on the lever *r* or in a channeled or sunken portion of lever *r* so as not to normally project above the top edge of lever *r*. A catch 2 on arm *h* can then slide back and forth on the lever *r* as the pawl arm *h* is swung back and forth by link *i*. When the lever *r* is raised by the rising sheet pile swinging up the lever *p* the stop *s* is tilted upward to project its free end above the face of lever *r* Fig. 3. The catch 2 now swing-

ing against the stop *s* will arrest the movement of the pawl arm and its pawl *g*. The pawl arm is loosely connected to link *i* so that the link can move when the pawl arm is arrested. A pin and slot connection can serve for loosely connecting the link and pawl arm. As the sheet pile diminishes the lever *p* with intermediate lever *r* sinks to allow stop *s* to drop clear of the catch 2 when the pawl *g* can then begin to actuate the wheel *f* to raise the sheet table. The arm *h* if left free will swing or oscillate by its weight and if in the position of the parts shown in Fig. 2 the link *i* moves to the right it will pull arm *h* to the right, and as the link *i* returns the arm *h* will oscillate back again unless the swing of arm *h* to the left is arrested by catch 2 striking stop *s*. The sheet adhering to the rim of wheel 5 is carried forward to be taken off by roller 6 between which and roller 7 the sheet is carried off. The mouth piece 4 connects with a suction tube 6 but as the pneumatic arrangement is already set forth in said previous application no specific mention thereof is necessary here.

The main shaft *m* can be actuated in any suitable way and can be provided with fast and loose pulleys. The sheet table *b* can be set by hand to any desired level when starting the machine. The shaft of ratchet wheel *f* can have a hand crank 27.

What I claim is:—

The combination, in a paper feeder, of a sheet support; mechanism for elevating the same including a movable member provided with a catch; a lever; a movable stop having one end thereof resting upon said lever; and means actuated by the supply of sheets upon said support for rocking said lever, to raise said stop end into position to engage said catch.

In testimony whereof I have hereunto set my hand in the presence of two subscribing witnesses.

JOSEPH HREN.

Witnesses:

CHRISTIAN ALMSTAEDT,
W. C. HAUFF.