

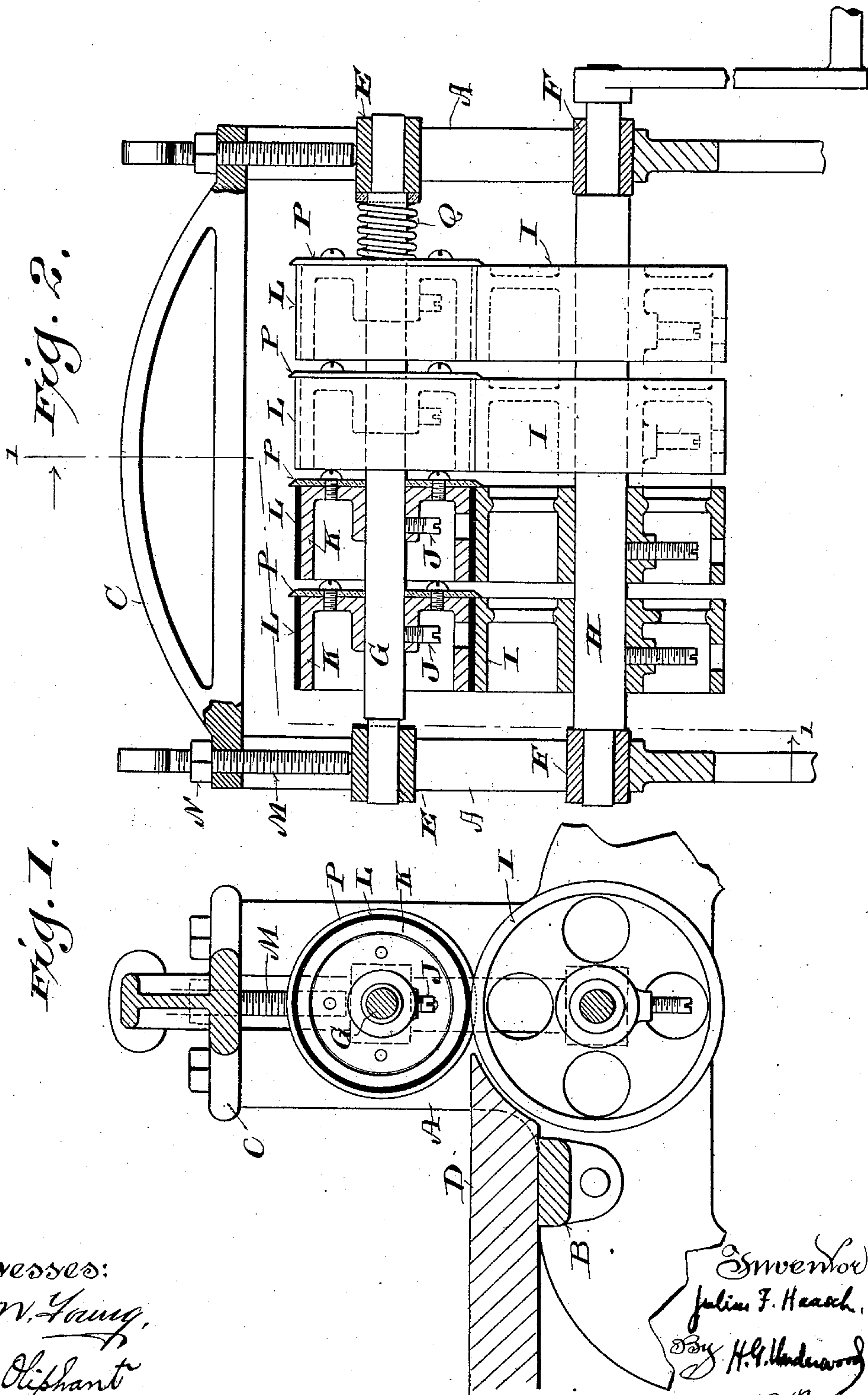
No. 672,899.

Patented Apr. 30, 1901.

J. F. HAASCH.
PAPER SLITTING MACHINE.

(Application filed Jan. 10, 1901.)

(No Model.)



Witnesses:
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UNITED STATES PATENT OFFICE.

JULIUS F. HAASCH, OF MILWAUKEE, WISCONSIN.

PAPER-SLITTING MACHINE.

SPECIFICATION forming part of Letters Patent No. 672,899, dated April 30, 1901.

Application filed January 10, 1901. Serial No. 42,729. (No model.)

To all whom it may concern:

Be it known that I, JULIUS F. HAASCH, a citizen of the United States, and a resident of Milwaukee, in the county of Milwaukee and State of Wisconsin, have invented certain new and useful Improvements in Paper-Slitting Machines; and I do hereby declare that the following is a full, clear, and exact description thereof.

Heretofore, so far as I am aware, newspaper and periodical mailing-lists, printed several columns to the sheet, have been laboriously, slowly, and oftentimes unsatisfactorily cut by hand with scissor-type shears, the labor being at all times trying and frequently painful to those employed at such work.

To provide a simple economical machine by which to easily, rapidly, and satisfactorily cut lists of the kind aforesaid is the especial object of my invention, said invention consisting in certain peculiarities of construction and combination of parts hereinafter particularly set forth, with reference to the accompanying drawings, and subsequently claimed.

Figure 1 of the drawings represents a sectional view of a paper-slitting machine in accordance with my invention, this view being indicated by lines 1 1 in the second figure; and Fig. 2, a partly-sectional end elevation of said machine.

Referring by letter to the drawings, A indicates each of a pair of standards braced apart by suitably-arranged bars B, one of which is shown in Fig. 1. A headpiece C is bolted at its ends to the upper extremities of the standards, and longitudinal slots are provided in said standards.

The assemblage of parts above specified constitute a frame that may be made for attachment to any convenient support or of itself constitute a support for one end of a table D, as herein shown.

Fitting the slots in standards A are boxes E F for journals of parallel shafts G H, the lower one of which is provided with a crank or other means for the application of power. Engaged by the counter-shaft are the hubs of a series of rollers K, in the form of cylindrical shells, and these rollers are held in adjusted position on said shaft by means of set-screws J, that turn in said hubs, these screws being in register with tool-apertures in the

roller-rims. Similar rollers I, of preferably greater diameter than those aforesaid, are likewise held in adjustable position on the power-shaft, and, as herein shown, the rollers K are preferably covered with bands L, of rubber or other suitable flexible material. Screws M, run through set-nuts N, and head-piece C of the machine-frame impinge the journal-boxes E, and thus an adjustable tension of the band-covered rollers K is had upon material passed between them and the ones, I, on the power-shaft.

Bolted to heads of rollers K are cutter-disks P, that lap the rim edges of the rollers I, these disks being kept snug in working position by the expansive force of a spiral spring Q, arranged on shaft G under compression between one of said disks and a washer adjacent to a journal-box for said shaft.

A sheet of paper on which mailing-lists are printed in columns is fed from table D or other support between the opposing rollers I K, so that the disks P will slit the paper between said columns, rotary motion being imparted to one set of rollers by turning the shaft to which they are connected and communicated by friction to the other set of rollers, whereby said paper is drawn forward in time with the slitting operation, the covering L on rollers K serving to cushion the aforesaid paper and to prevent tearing of same.

The operator starts the sheet of paper and guides the same, so as to insure against cutting into the columns of printing thereon, and the work is rapidly performed with but little effort on the part of said operator, all the columns on said sheet being cut out at the same time, the number of rollers in each series and that of the cutting-disks being proportionate to the number of said columns and provision had by proper spacing of said rollers to leave sufficient margin on each side of each column of printed matter on each strip as it comes from the machine.

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

1. A paper-slitting machine comprising a frame, power and counter shafts journaled in boxes engaging slots in frame-standards, a series of opposing feed-rollers on the shafts

each roller consisting of a cylindrical shell having a tool-aperture in its rim and a shaft-fitting hub provided with a set-screw in register with said aperture; cutting-disks bolted
5 to heads of one set of rollers to lap rim edges of the other set, a spiral spring under compression between a cutting-disk and journal-box of the shaft carrying the roller to which said disk is secured, and means for regulating
10 friction between the opposing rollers.

2. A paper-slitting machine comprising a frame, a table having one end thereof in connection with the frame, power and counter shafts journaled in boxes engaging slots in
15 frame-standards, a series of opposing feed-rollers on the shafts each roller consisting of a cylindrical shell having a tool-aperture in

its rim and a shaft-fitting hub provided with a set-screw in register with said aperture; cutting-disks bolted to heads of one set of
20 rollers to lap rim edges of the other set, a spiral spring under compression between a cutting-disk and journal-box of the shaft carrying the roller to which said disk is secured, and means for regulating friction between
25 opposing rollers.

In testimony that I claim the foregoing I have hereunto set my hand, at Milwaukee, in the county of Milwaukee and State of Wisconsin, in the presence of two witnesses.

JULIUS F. HAASCH.

Witnesses:

N. E. OLIPHANT,
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