E. W. KORFF.

SHEET JOGGER.

APPLICATION FILED JUNE 21, 1911.

1,008,651. Patented Nov. 14, 1911.

Fig. 1.

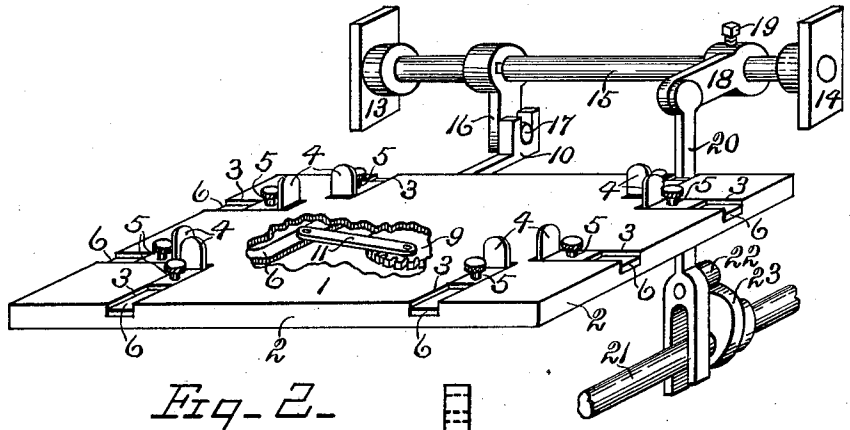


Fig. 2.

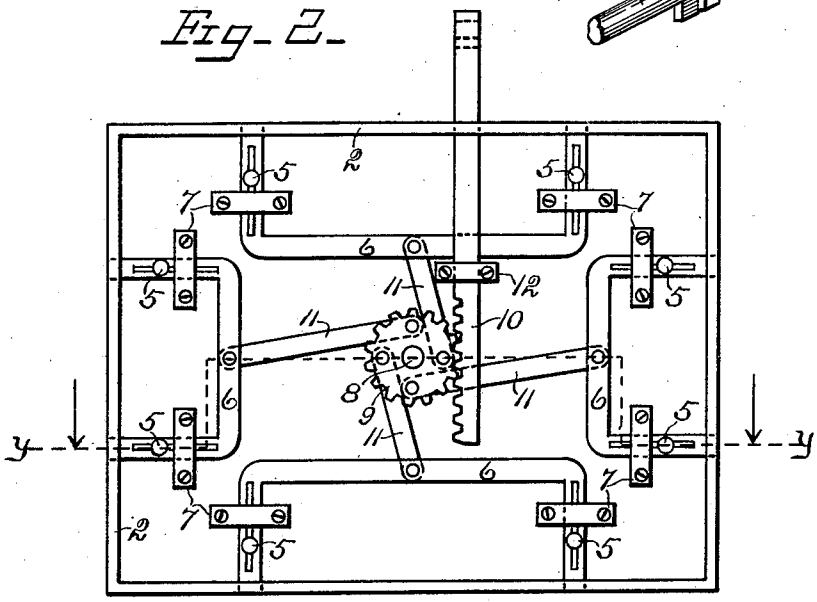
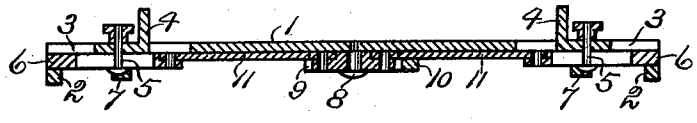


Fig. 3.



Witnesses: John A. Smith, Jaques F. Smith

Edward W. Korff, Inventor

By his Attorney Wm. H. Purcell

COLUMBIA PLANOGRAPH CO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

EDWARD W. KORFF, OF BROOKLYN, NEW YORK.

SHEET-JOGGER.

1,008,651. Specification of Letters Patent. Patented Nov. 14, 1911.

Application filed June 21, 1911. Serial No. 634,562.

To all whom it may concern:

Be it known that I, EDWARD W. KORFF, a citizen of the United States, and resident of the borough of Brooklyn, in the county of Kings and State of New York, have invented certain new and useful Improvements in Sheet-Joggers, of which the following is a specification.

This invention relates to improvements in what are commonly known as sheet-joggers for printing, lithographing, or similar machinery, and the object thereof is to provide a simple and reliable device for individually locating the sheets as they are delivered from the fly, and for arranging them with edges accurately registered, in a neat, vertical pile.

I am aware that jogging devices have been employed wherein a plurality of sheet-engaging members have been caused to move toward and from each other for the purpose of adjusting the sheets as they are delivered to the piling table; my invention, however, consists in certain structural features which combine to effect precise and regular movement of the sheet-engaging members, and experience has shown that this is essential in the stacking of large sheets, especially when they are damp, in which condition they are often delivered from the fly of a lithographic press.

The invention will be hereinafter described in the specifications and defined in the annexed claim.

In the accompanying drawings, in which similar characters of reference indicate similar parts throughout the several views, Figure 1 is a perspective view of my improved jogging device and the mechanism for actuating it from the main cam-shaft of an ordinary lithographic press; the receiving platform being shown as partly broken away to disclose some of the parts. Fig. 2 is a plan of the device as viewed from below the platform, and Fig. 3, a sectional view taken on the line Y—Y of Fig. 2, looking in the direction indicated by the arrows.

Referring to the various parts in detail, the numeral 1 indicates the receiving platform, preferably constructed of sheet metal, which is adapted to be placed on the piling table of a printing or lithographic press, and which is bordered by a rim 2. Perforating, and extending inward from this rim on all four sides, are slots 3 which form guide-ways for the sheet-engaging members 4 (shown as angled pieces, pierced for the passage of bolts 5.) These slots serve also as guides for the legs of U-shaped slide-members 6 which are located beneath the receiving platform and slidably held in position by guide-locks 7. The said legs are also slotted longitudinally so that the bolts 5 (which are headed at one end and provided with thumb-nuts at the other) may pass through them: the purpose of this being to permit the sheet-engaging members 4 to be located and clamped on the slide-members 6 at different distances from the rim 2 when adjustment of the device for different sized or shaped sheets is required.

Oscillatingly mounted upon a stud 8 that projects from the under side of the platform, is a gear-wheel 9, the teeth of which mesh with the teeth of a rack-bar 10.

The numerals 11 denote arms, each having one end pivotally connected to a slide-member 6 and the other end pivotally connected to the gear-wheel eccentric thereof. The rack-bar 10 is guided by a guide-block 12 and by passing through an aperture in the rim 2, and is laterally movable in the said guides. The outer end of the bar 10 is forked for a purpose which will presently appear.

While in some instances it may be desirable to actuate the device from the fly-shaft or other suitably movable part of the press, I prefer to actuate it from the main cam-shaft. To accomplish this, I attach to the frame of the press in suitable positions, bearings 13 and 14, to support a shaft 15 that extends across the end of the press parallel with the fly-shaft. Fixed on this shaft are an arm 16, having a stud 17 which engages the forked end of the rack-bar, and a secondary arm 18 provided with a set-screw 19, by which it may be fixed to the shaft or released therefrom, if it be desired to run the press without operating the device. Pivotally attached to this arm 18 is a bar 20 which is forked at its lower end so as to straddle and be guided by the main cam-shaft 21 of the press, and carries a roller 22 that bears against a cam 23 fixed on said cam-shaft.

The operation of the device will be readily understood by those familiar with printing and lithographing machinery; it being apparent that as the main cam-shaft 21 of the press rotates, the bar 20 will be caused to rise and permitted to fall at predetermined

times relative to the time of delivery of the sheets from the fly, depending upon the shape of the cam 23 and its setting on the cam-shaft. This rising and falling of the bar will cause the shaft 15 to rock, and the arm 16 to move the rack-bar 10 reciprocatingly, which, in turn, will cause the gear-wheel 9 to oscillate, and by means of the connecting arms 11, move the U-shaped slide-members and the sheet-engaging members 4 which they carry, inward and outward at proper times to receive the sheets as they are successively delivered from the fly, and to adjust them in the desired manner.

It will be noted that no springs are employed to move the parts, they being positively moved in one direction by the action of the cam 23, and in the other direction by the weight of the bar 20.

I claim as my invention:

In a sheet jogger, the combination of a receiving platform having extending therethrough, and inward from each side thereof, a plurality of guideways; a plurality of U-shaped slide-members under said platform, the parallel legs of which are longitudinally slotted, bolts passing through said slots, sheet-engaging members projecting through the guideways and attached to the slide-members by the said bolts so as to be independently adjustable toward and from the rim of the platform, a gear-wheel oscillatingly mounted upon a stud located under the platform, a plurality of arms, each having one end connected to said gear-wheel, eccentric thereof, and the other end to one of the slide-members, a rack engaging the gear-wheel, and mechanism for moving said rack reciprocatingly.

Signed at 143 Liberty St. Manhattan borough, in the county of New York and State of New York this 19th day of June, A. D. 1911.

EDWARD W. KORFF.

Witnesses:

FREDERICK B. BLACKMAN,

JOHN J. CARROLL.