

No. 617,851.

Patented Jan. 17, 1899.

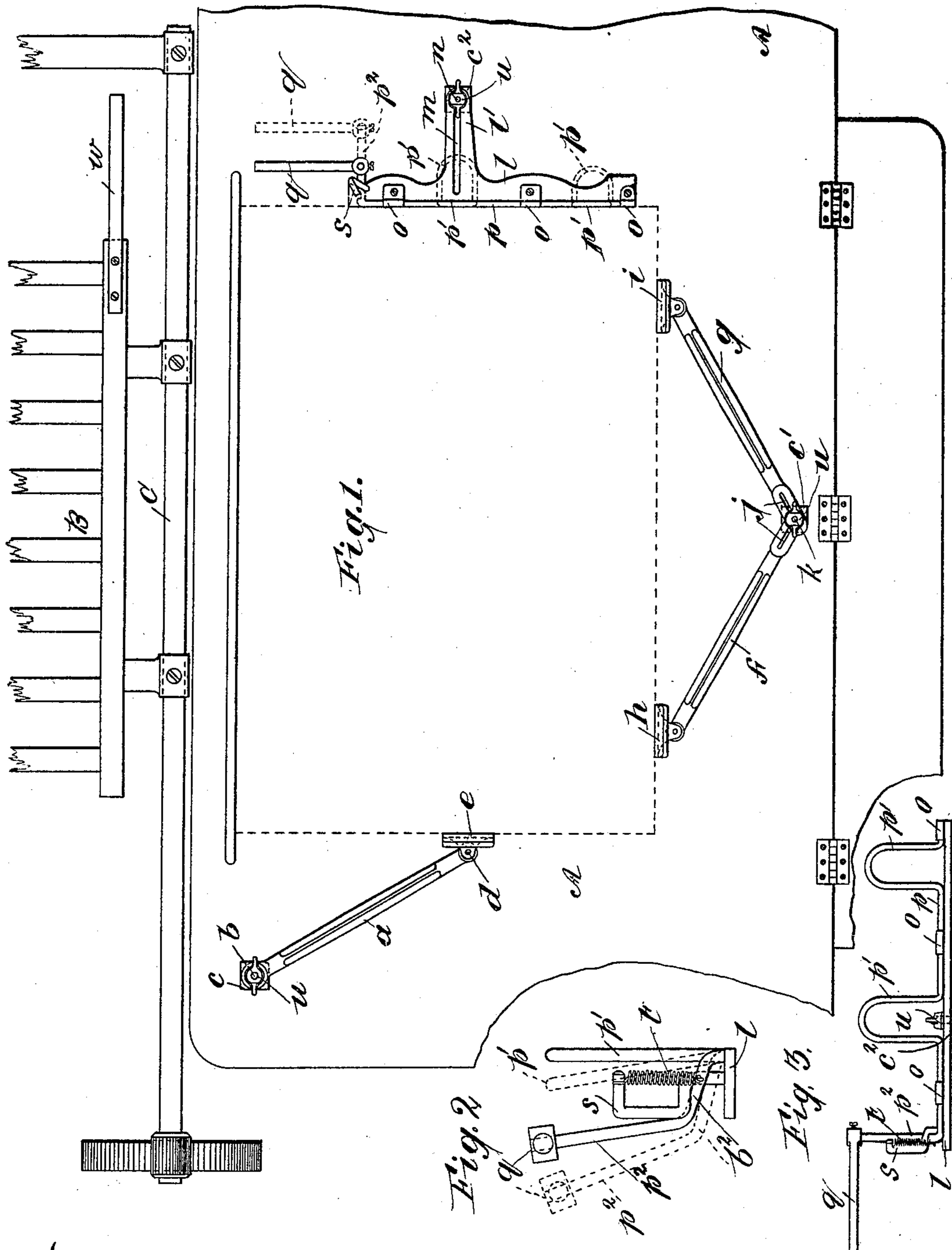
W. CARTER.

SHEET ADJUSTER FOR PRINTING PRESSES.

(Application filed Dec. 15, 1897.)

(No Model.)

2 Sheets—Sheet 1.



Witnesses:
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C. Holloway

Inventor:
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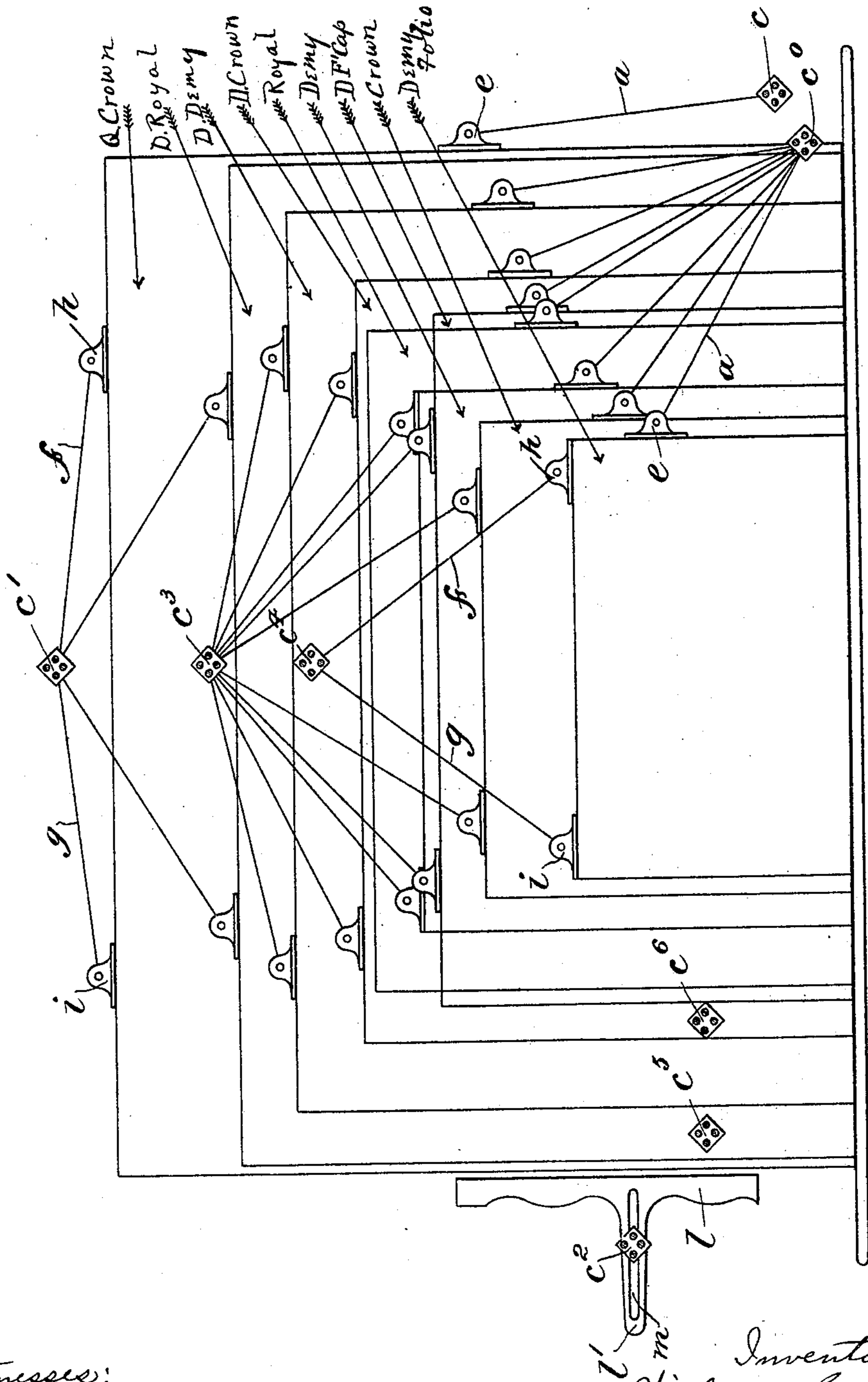
SHEET ADJUSTER FOR PRINTING PRESSES.

(Application filed Dec. 15, 1897.)

(No Model.)

2 Sheets—Sheet 2.

Fig. 4.



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UNITED STATES PATENT OFFICE.

WILLIAM CARTER, OF GLASGOW, SCOTLAND.

SHEET-ADJUSTER FOR PRINTING-PRESSES.

SPECIFICATION forming part of Letters Patent No. 617,851, dated January 17, 1899.

Application filed December 15, 1897. Serial No. 661,974. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM CARTER, a subject of the Queen of Great Britain, and a resident of the city of Glasgow, Scotland, have invented certain new and useful Improvements in Sheet-Adjusters for Printing-Machines, (patented in Great Britain October 5, 1897, No. 22,797,) of which the following is a specification.

10 This invention relates to the sheet-adjusters of letter-press and lithographic printing-machines, and it has for its object to improve their construction.

15 My improved sheet-adjuster is very simple in construction and efficient in action. It can be secured to the usual delivery-board or table of the machine and it requires no connection with the fly-shaft.

20 In order that my said invention may be properly understood, I have hereunto appended two explanatory sheets of drawings, whereon—

Figure 1 is a plan view of the apparatus. Fig. 2 is a detail end view, to an enlarged scale, of a part of the apparatus. Fig. 3 is a front view of the part shown at Fig. 2. Fig. 4 is a diagram showing the method of adjusting the "jogger-slides" for different sizes of sheets.

30 Referring to the drawings, whereon the same reference-letters wherever repeated indicate the same parts, A is the usual table of a lithographic or letter-press printing-machine.

B is the flier.

C is the fly-shaft.

35 The apparatus consists of three adjustable parts, which may be secured to the table in any well-known and suitable manner.

40 The first part consists of a simple arm *a*, which is pivoted at *b* to the table. Pivoted or hinged to the end of the arm at *d* is a slide-block *e*, which is curved rearwardly at its upper end. The arm *a*, with its slide-block *e*, is capable of being moved radially about the center *b*.

45 The second part consists of two arms *f g*, having pivoted or hinged slide-blocks *h i* at their ends similar to the slide-block *e*. The arms *f g* are provided with slots *j* for longitudinal adjustment, which are, as shown, centered upon a screw-stud *k*, secured in or to the table. The arms *f g* are capable of being moved radially about the center *k*.

The third part of the apparatus consists of a slide *l*, provided with a rearward extension *l'*, which is slotted at *m*. A screwed stud *n*, 55 secured in or to the table, projects up through the slot *m*. Connected hingewise to the slide by means of straps *o* is a strong wire *p*, which is bent upward or looped at *p' p'*. (See also Fig. 3.) The end *p²* of this wire is also bent 60 backward and upward, as shown at *b²*, Fig. 2, and is provided with an adjustable arm *q*. *s* is a vertical standard fitted in the slide, which has a spiral spring *t*, whose lower end is connected to the part *b²* of the wire aforesaid. 65

The arms *a, f*, and *g* and slide *l* are preferably fitted to the table by means of the studs *b k n*, which are secured in blocks *c c' c²*, (see also Fig. 4,) screwed in the proper position to the table. The radial arms and the slide can 70 be clamped to the blocks *c c' c²* in the desired position by means of butterfly-nuts *u*, which screw upon the studs of the blocks.

A longer or shorter arm *q* may be used, as desired. 75

The flier has a laterally-projecting arm *w* secured to it.

The blocks *c c' c²* can be secured in different positions on the table, (such as *c c⁰ c' c³ c⁴ c² c⁵ c⁶*, Fig. 4,) so as to suit the different sizes 80 of paper. Fig. 4 shows how the radial arms and the slide *l* can be shifted for sizes of paper from "demy folio" up to "Q crown."

Presuming that the radial arms *a f g* and the blocks *e h i* and the slide *l* have been 85 properly adjusted and clamped in position to suit the size of sheet being printed, the action of the device is as follows: As the flier delivers each sheet the bar *w* strikes against the arm *q* and depresses it, and as a consequence 90 forces back the wire *p* against the action of the spring *t* to an inclined position, so as to allow the sheet to fall down. Immediately the flier rises again after delivery of the sheet the spring *t* causes the wire *p* to resume its 95 former vertical position, and as a consequence automatically knock the sheet into place on top of the pile.

The dotted lines at Figs. 1 and 2 indicate the position of the wire *p* when depressed by 100 the action of the bar *w*.

The blocks *h i* are made narrow enough to pass between the flies of the flier.

Having now fully described my invention,

what I claim, and desire to secure by Letters Patent, is—

1. The combination with the table and the flier of a printing-machine the flier being provided with an extension, of a jogger-slide having a spring device consisting of a wire p having loops p' , end p^2 and an arm q which, after being moved out of its normal position by the action of the flier, at the delivery of the sheet, automatically resumes its position, after the delivery has been effected, and thereby pushes the sheet delivered into correct position.

2. The combination with the table and the flier of a printing-machine, of a jogger-slide made with a rearward extension, a slot in the extension, means for clamping the slide to the table of the machine, and an automatically-acting device, comprising a bent wire p having a hinge-like connection with said slide, a spring normally holding said wire, an arm

carried by the fly adapted to turn said wire against the spring and to release the same whereby the spring reacts on the wire for knocking up the sheets, substantially as set forth.

3. The combination with the table and the flier of a printing-machine, of an adjustable jogger-slide, a wire p movably secured to the slide, bent parts p' , p^2 , on the wire, a standard s on the slide, a spring t connecting the standard and the end of the wire p together, an arm q on the wire, and means connected with the flier for depressing the arm, substantially as set forth.

Signed at Glasgow, Scotland, this 27th day of November, A. D. 1897.

WILLIAM CARTER.

Witnesses:

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WILLIAM FLEMING.