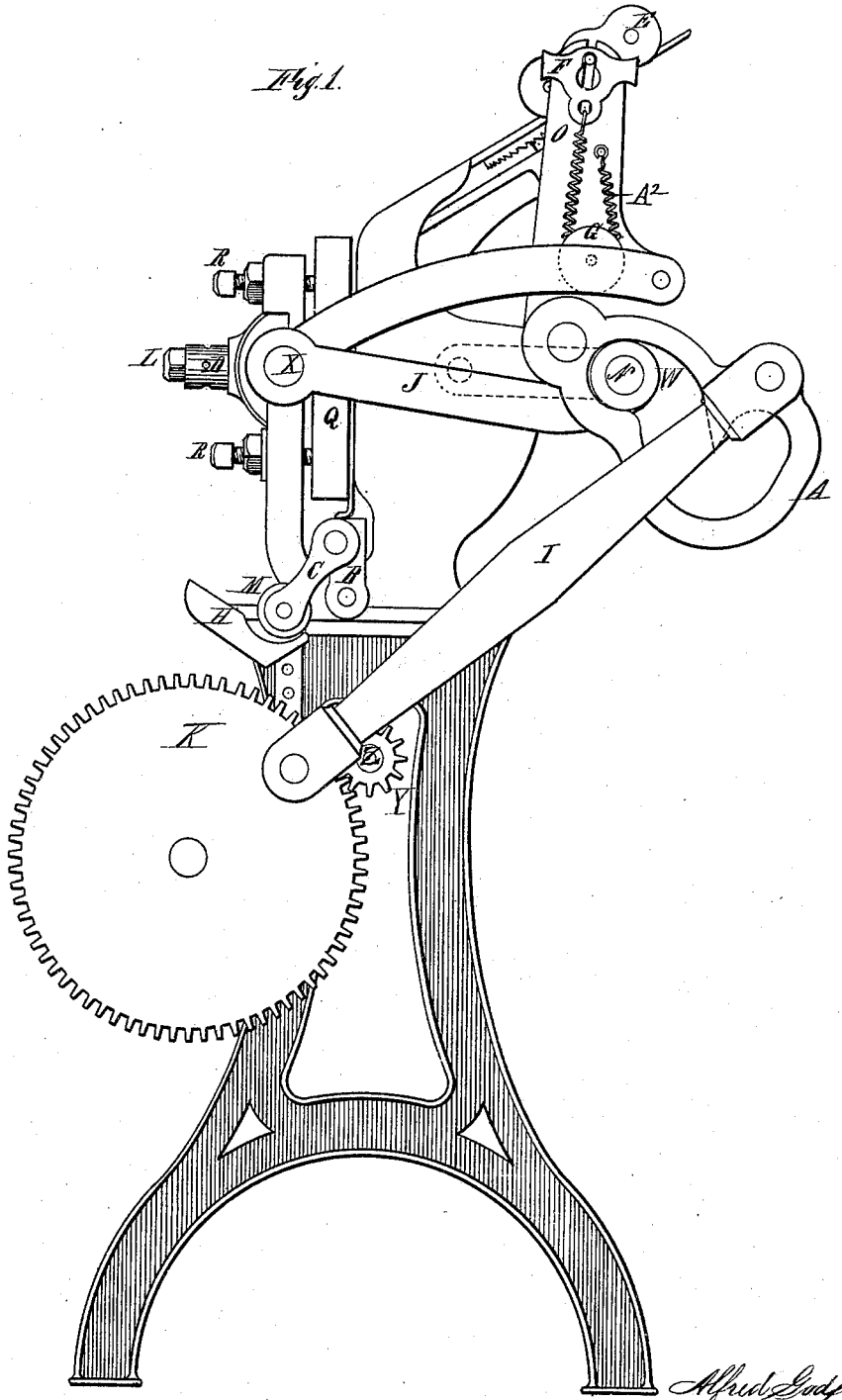
4 Sheets—Sheet 1.

A. GODFREY.
Printing-Press.

No. 212,797. Patented Mar. 4, 1879.

Fig. 1.



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Attorney.

4 Sheets—Sheet 2.

A. GODFREY.
Printing-Press.

No. 212,797. **Patented Mar. 4, 1879.**

Fig. 3.

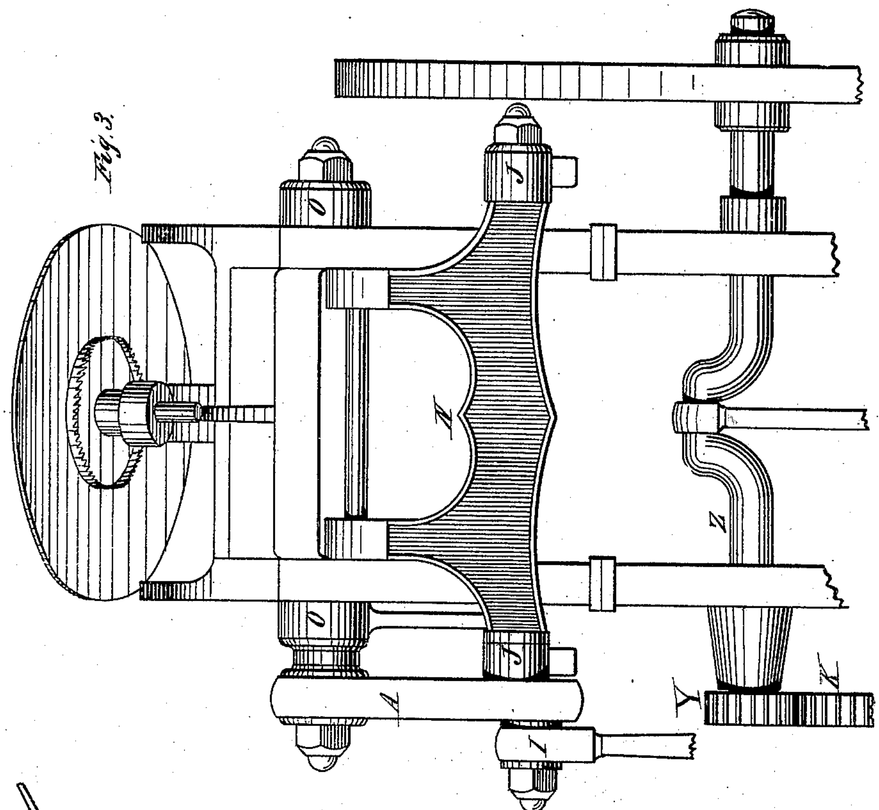
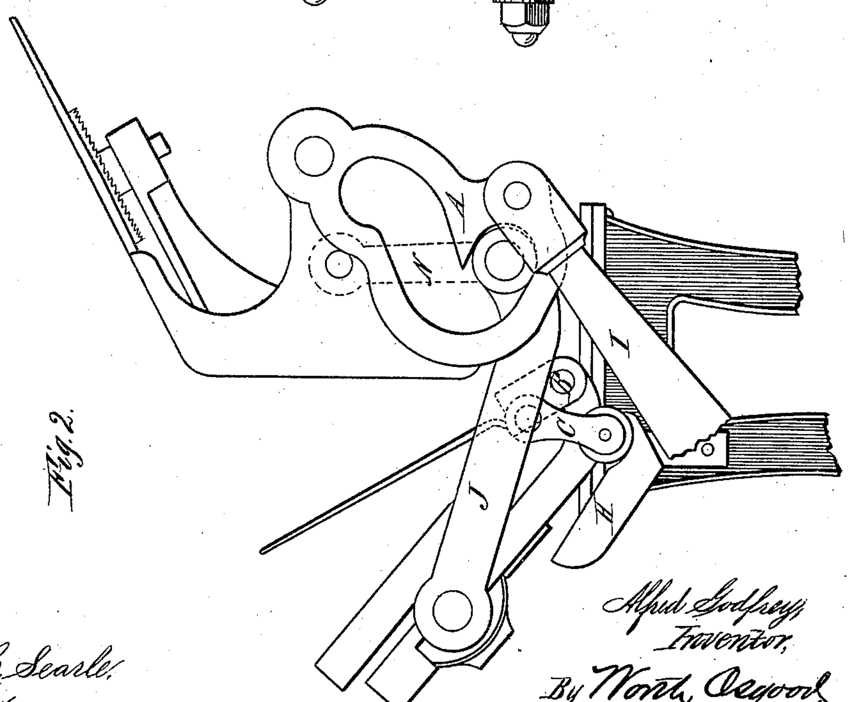


Fig. 2.



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4 Sheets—Sheet 3.

A. GODFREY.
Printing-Press.

No. 212,797. Patented Mar. 4, 1879.

Fig. 3.

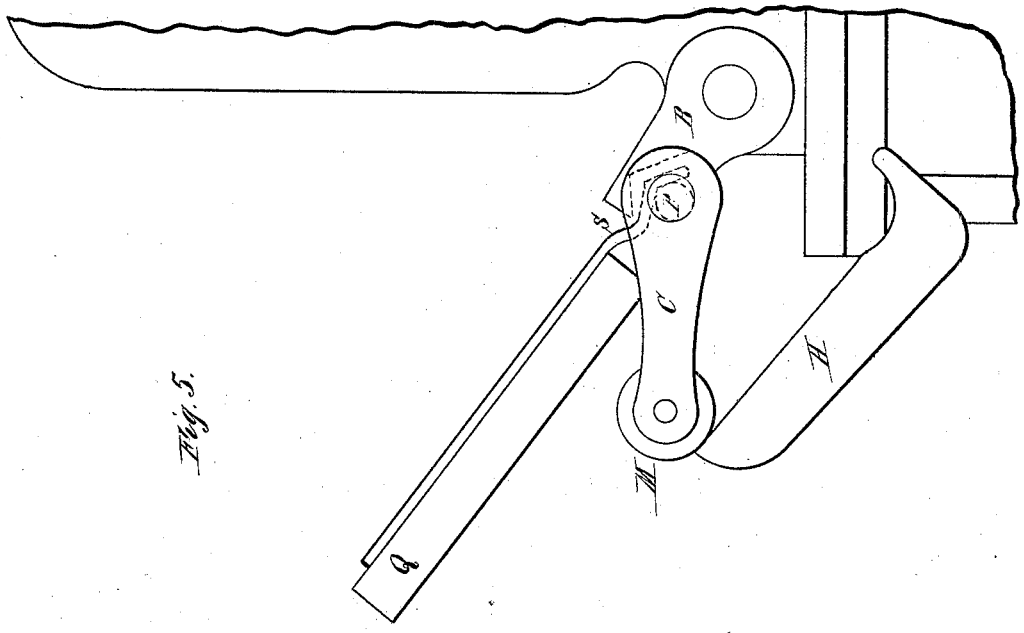
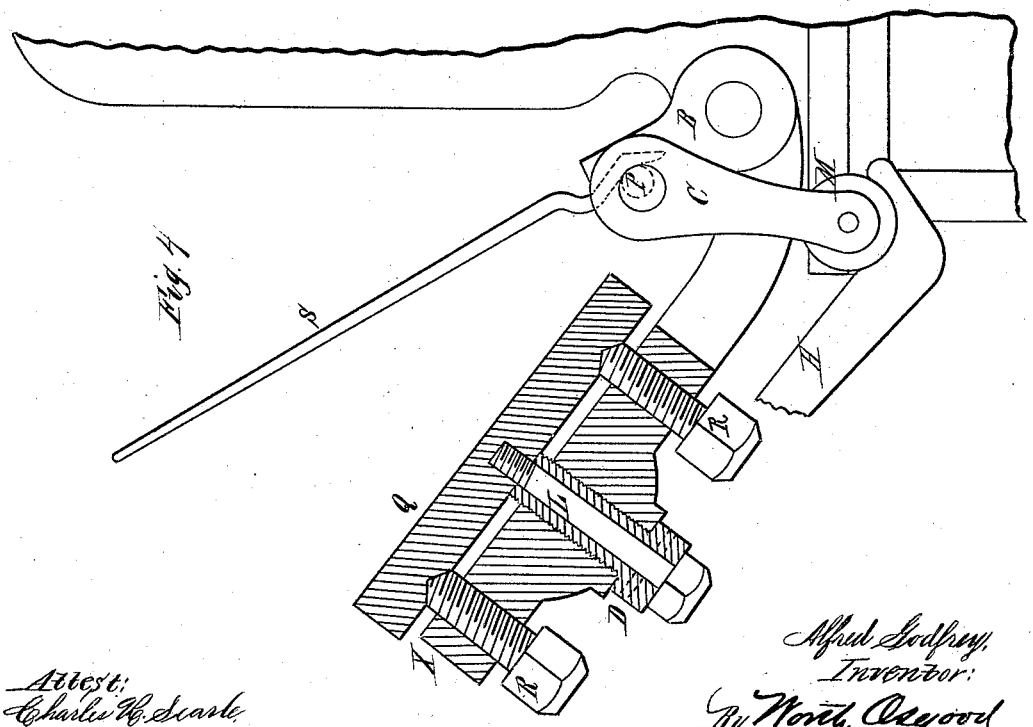


Fig. 4.



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Printing-Press.

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Fig. 8.

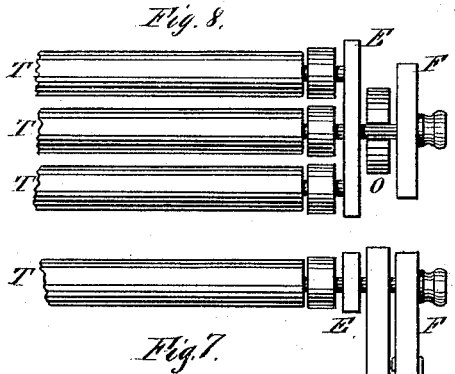


Fig. 7.

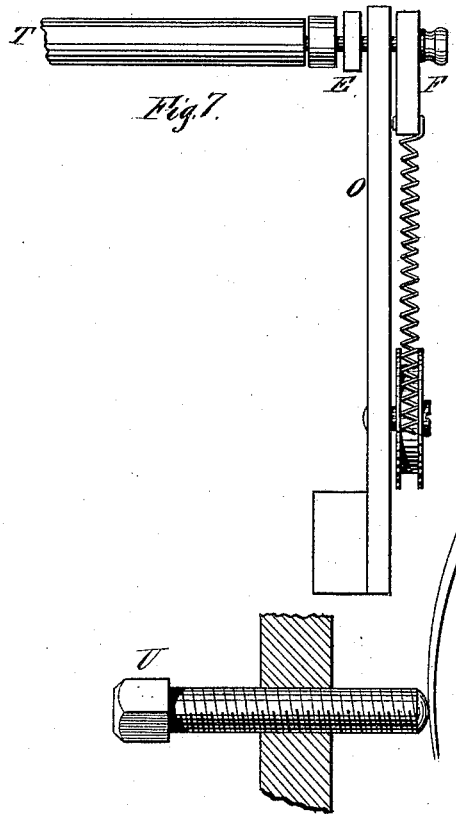
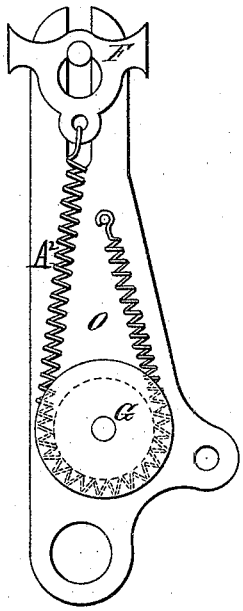


Fig. 9.

Fig. 6.



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UNITED STATES PATENT OFFICE.

ALFRED GODFREY, OF BROOKLYN, NEW YORK.

IMPROVEMENT IN PRINTING-PRESSES.

Specification forming part of Letters Patent No. **212,797**, dated March 4, 1879; application filed January 29, 1879.

To all whom it may concern:

Be it known that I, ALFRED GODFREY, a resident of the city of Brooklyn, county of Kings, and State of New York, have invented, discovered, and applied to use certain new and useful Improvements in Printing-Presses, not known or used by others in this country or elsewhere, and not patented or described in any printed publication in this or any foreign country before my invention or discovery thereof, and not in public use or on sale for more than two years prior to this application, which improvements are fully set forth in the following specification, reference being had to the accompanying drawings.

The nature of these improvements consists in providing for an increase of power and a decrease of speed at the instant the press closes on the impression, thereby obviating all shock and jar usual in printing-presses; and this is accomplished by certain specific combinations, as will be hereinafter set forth.

Generally presses have had a perceptible stoppage and shock at the moment of impression, thereby causing great strain on the machinery, frequent breakage, much noise when in operation, and have required a great deal of power to run them. Whereas, with my improvements, while the power of the press is largely increased as the platen closes on the type, it runs as easily at the time of the impression as at any other period of the movement. Therefore, less power is required to run it, the machine is more durable, and is not so liable to destroy the type. The comparatively long period of rest when the platen is in position to receive the paper permits the press to be run very fast, and still allows sufficient time to feed it. No "overlays" or "underlays" of paper on the form or on the platen are necessary. A perfect impression is produced the full size of the chase.

With this improvement the press can be used not only for ordinary printing, but for embossing papers, cards, backs of books, &c.

To enable any person skilled in the art or arts, science or sciences, to which my improvements appertain, or with which they are, or either of them is, most nearly connected, to make, construct, and use the same, I hereby describe the same, and the manner and process of making, constructing, and using it and them, viz:

Figure 1 is a side, and Fig. 3 a partial rear, elevation of my improved printing-press.

A on Fig. 1 is a cam, so shaped as to give the necessary "dwell" on the impression and the necessary period of rest for the reception of the sheet. W is a roller, working on the end of the bar N, which is connected with the platen-back X by means of the side arms J J. The cam A is operated by means of the connecting-arm I, in conjunction with the gear-wheel K, operated by the pinion Y, by means of the crank-shaft Z. The bar N and arms J connected therewith form a toggle-joint by means of which the platen is operated.

B, Fig. 4, is a bar, recessed in the form of a V or other convenient form. S is a frisket-finger, sliding in the bar B. P is a shaft, the journals being eccentric to that part of the shaft which comes in contact with the frisket-fingers. C is a handle attached to the said shaft P. M is a roller, working on the end or side of the handle C. H is an inclined plane, fastened rigidly to the frame of the press.

It is obvious that by turning the handle C, Fig. 4, the shaft P is turned partially round on its journals, which journals being eccentric to the part of the shaft coming in contact with the frisket-fingers S, the same are loosened. At the same time the handle C passes along the inclined plane H, allowing the frisket-fingers to fall on the platen Q for adjustment, as represented in Figs. 2 and 5.

B in Fig. 9 is the frisket-finger bar; S, the frisket-fingers; Q, the platen; V, a spring; U, a set-screw.

It will be seen that by turning the set-screw U the tension of the spring V can be adjusted at will, thereby tightening the frisket-fingers against the platen Q or loosening the same, as may be desired.

Q in Fig. 4 is the platen; X, the platen-back. R R R R are four set-screws, supporting the platen at or near the four corners. D is a hollow set-screw, supporting the platen in the center. L is a bolt, passing clear through the set-screw D, thereby holding the platen firmly against the set-screws R R R R and D, without springing the platen in the center.

O in Fig. 6 is the roller-arm. G is a grooved

wheel or pulley. T T T are inking-rollers. E is the saddle; F, the yoke; A^2, the spring, passing around the wheel G, the one end fastened to a stud in the arm O, the other end to the yoke F, said yoke passing over the end of the shaft of the central roller, T. It is obvious the spring will pull the rollers against the type.

F, Fig. 6, is the yoke; A^2, the spring; and G, the pulley-wheel.

By the drawings, Figs. 6, 7, and 8, it will be seen that, the saddle E being larger in diameter than the ink-rollers T T T, the whole (saddle and rollers) can be removed together when the yoke F is removed, and the said rollers cannot come in contact with anything when laid in a horizontal position.

I hereby point out and distinctly claim the part or parts, improvement or improvements, combination or combinations, which I claim as my invention or discovery:

1. The combination of cam A, gear-wheels Y K, connecting-rod I, bar N, and arms J J, coupled with the platen-back X, the whole being arranged as shown and described.

2. The combination of the recessed griper-bar B, Fig. 5, the suitably-shaped griper S, the eccentric-shaft P, the handle C, attached to the same, the roller M, and the inclined plane H, for the purposes above set forth.

Dated at the city of Brooklyn this 6th day of October, in the year 1877.

ALFRED GODFREY.

Witnesses:

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DAVID M. RORTY.