



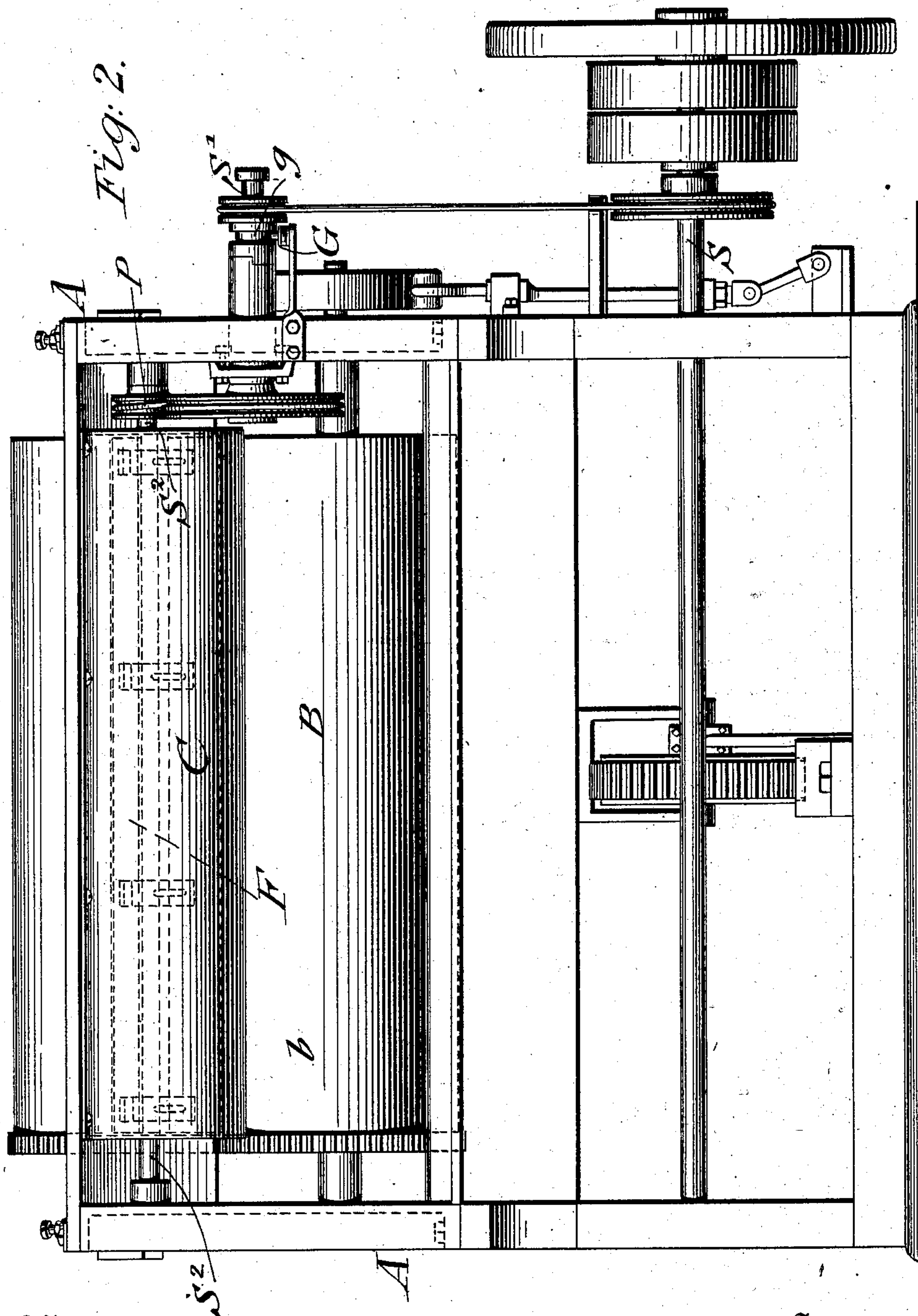
No. 721,420.

PATENTED FEB. 24, 1903.

R. D. BUNCKE.  
LITHOGRAPHIC PRESS.  
APPLICATION FILED NOV. 6, 1902.

NO MODEL.

3 SHEETS—SHEET 2.



Witnesses  
*Henry J. Schrier*  
*C. Bradway*

Inventor  
*Richard D. Buncke*  
By his Attorneys. *Looney Viles*



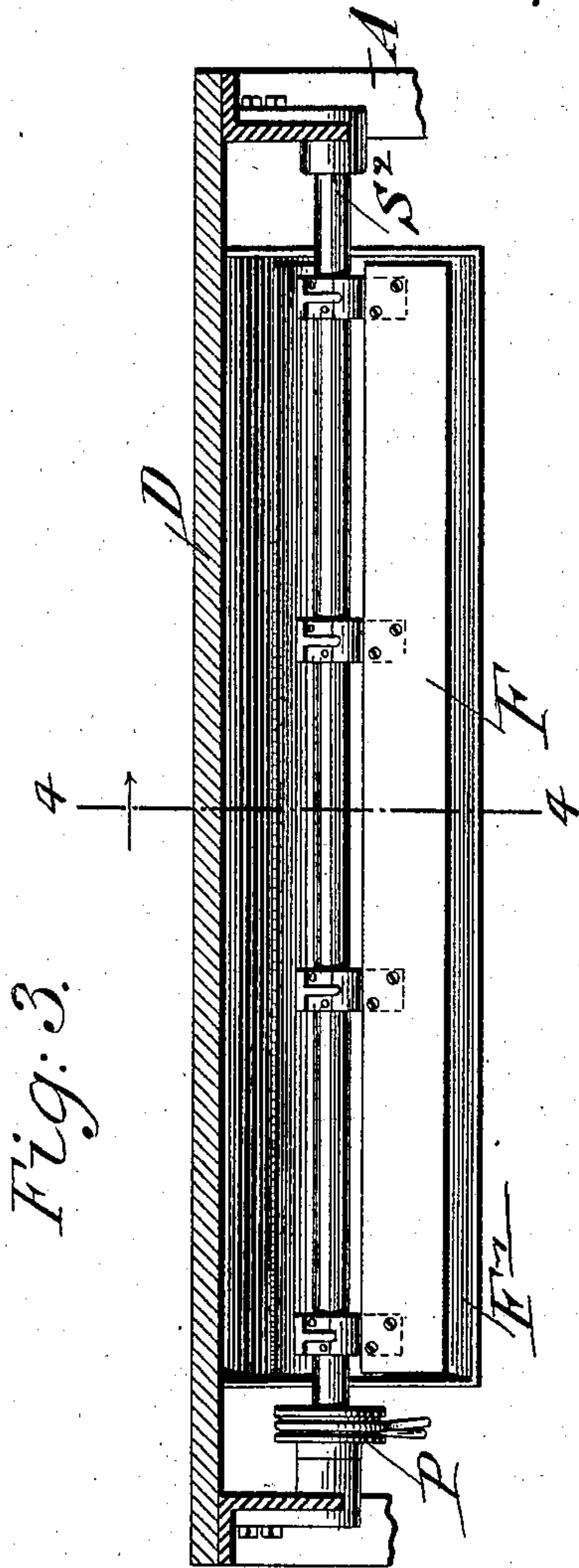
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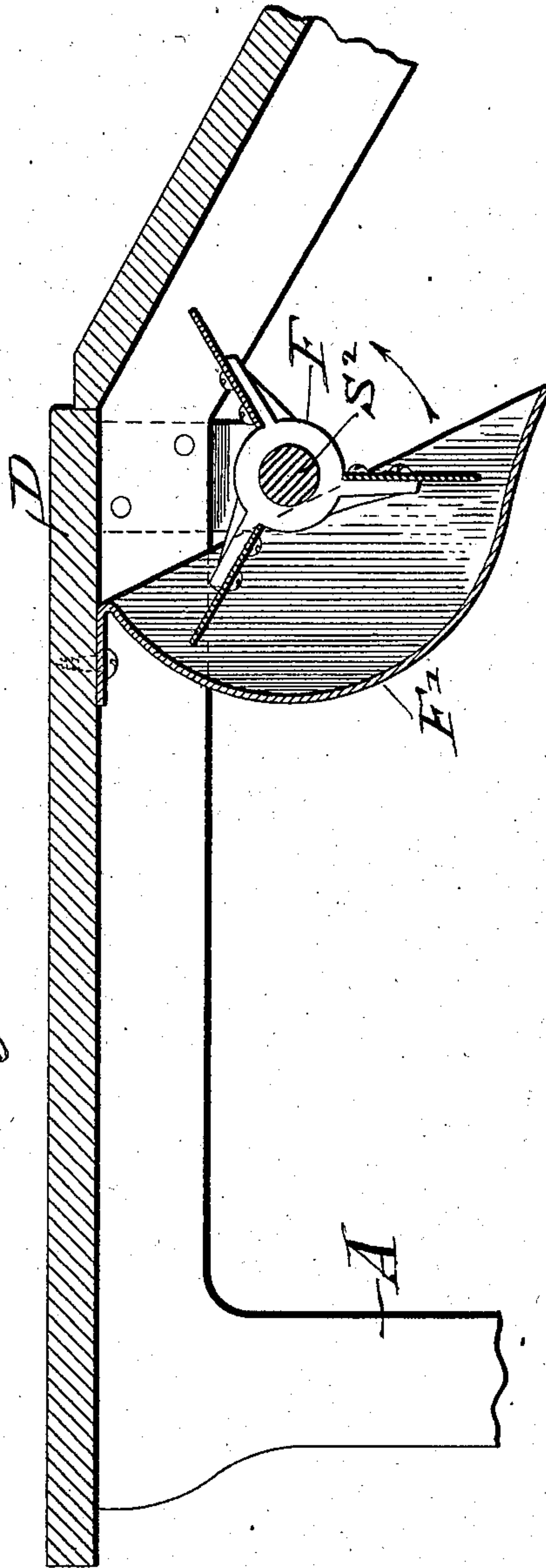
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*Fig. 4.*



Witnesses  
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# UNITED STATES PATENT OFFICE.

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## LITHOGRAPHIC PRESS.

SPECIFICATION forming part of Letters Patent No. 721,420, dated February 24, 1903.

Application filed November 6, 1902. Serial No. 130,271. (No model.)

*To all whom it may concern:*

Be it known that I, RICHARD D. BUNCKE, a citizen of the United States, residing in Jersey City, in the county of Hudson and State of New Jersey, have invented certain new and useful Improvements in Lithographic Presses, of which the following is a specification.

In lithographic presses used for printing tin-plate and other sheet metals the colors are transmitted to the plates fed to the impression-cylinder from the stone by means of a blanket on the transmitting-cylinder, to which blanket the colors are transferred from the stone. It is necessary that this blanket be perfectly dry, so as to receive the colors from the stone for transmitting the same to the plate. As the blanket, however, becomes moistened by the transfer of the colors to the same the colors are not transmitted to the plate with the required clearness and distinctness.

The object of this invention is to form an improved drying attachment for the blanket, so that the colors are transmitted in a clear and effective manner from the stone to the sheet-metal plate; and for this purpose the invention consists in the combination, with the lower blanket-carrying cylinder and upper pressure-cylinder, of a feed-table inclined at its forward end to feed the plates between said cylinders, a ventilating-fan located adjacent said blanket-carrying cylinder below the feed-table, means for rotating said fan, means for permitting the stopping of rotation of the fan, and a deflecting-hood adapted to direct the current of air from the fan upon the blanket-carrying cylinder, as will be more fully described hereinafter and finally pointed out in the claims.

In the accompanying drawings, Figure 1 represents a side elevation of a lithographic press for printing sheet-metal plates, with my improved drying attachment. Fig. 2 is an end elevation of the press. Fig. 3 is a transverse section on line 3 3, Fig. 1; and Fig. 4 is a vertical transverse section, drawn on a larger scale, through the drying device on line 4 4, Fig. 3.

Similar letters of reference indicate corresponding parts.

Referring to the drawings, A represents the

frame of a lithographic press of that class which is used for the printing of tin or other sheet-metal plates. The middle portion of the frame A supports two cylinders B and C, one above and rotatably in contact with the other. Adjacent the contact portions of the cylinders B and C is arranged an inclined portion of the feed-table D, on the upper horizontal portion of which the plates to be decorated are fed. The plates are fed over the inclined portion of the table D, so as to be passed through the printing-cylinders. The lower cylinder B is provided with the usual rubber blanket *b*, that takes the impression from the stone that is adapted to be supported on the reciprocating bed of the machine and supplied with the colors from the ink-rolls in the well-known manner. The blanket transfers the impression from the inside of the tin-plate back to the same, the upper cylinder taking up the tin-plate and moving it between the cylinders, so as to receive the impression. As the rubber blanket is moistened by the successive transfer of the impressions, which is very objectionable, as the colors are not clearly and distinctly transferred to the tin-plate, a drying attachment is arranged in proximity to the blanket, so as to dry the same after each impression is made. This drying arrangement consists of a ventilating-fan F, to which rotary motion is imparted in the direction of the arrows shown in Fig. 4 by means of a pulley-and-belt device P, connected with a lower shaft S through an intermediate shaft S' and a shaft S<sup>2</sup> of the fan. The motion of the fan can be stopped when desired by means of a clutch device *g* and a clutch-shifting lever G, which is arranged on the intermediate shaft S', so that by shifting the lever sidewise the clutch is disengaged, so that the motion of the fan is arrested when the same is not required.

The fan is preferably arranged in the frame A of the press below the point where the horizontal and inclined portions of the feed-table D meet each other. Back of the rotating fan F is arranged a deflecting plate or hood F', which is open at the front toward the under side of the inclined portion of the feed-table and cooperating therewith to direct the cur-



rent of air from the fan in the direction of and along the under side, so as to throw the full force of the air-current onto the blanket of the lower cylinder B (shown by the arrows, 5 Fig. 1) as the same rotates in transferring the impression taken up from the stone. In this manner the surface of the blanket-cylinder is continually subjected to the drying effect of a current of air, whereby the moistening of the surface is prevented and the same 10 kept in proper condition for clearly and effectively transmitting the impression to the sheet-metal plates to be decorated. The rotation of the fan is kept up as long as the 15 plates are printed, so that the blanket is dried during its rotation and during the period of taking it from the stone to the plates to be decorated.

Having thus described my invention, I 20 claim as new and desire to secure by Letters Patent—

1. The combination, with a lower blanket-carrying cylinder and upper pressure-cylinder of a lithographic press, of a feed-table inclined at the front end, a ventilating-fan below the same at the upper end of the inclined 25 portion, means for rotating the fan, and means for deflecting the air forward toward and along the under side of the inclined portion of the 30 feed-table, substantially as set forth.

2. The combination, with a lower blanket-carrying cylinder and upper pressure-cylinder of a lithographic press, of a feed-table inclined at its front portion, a ventilating-fan 35 supported under said table at the beginning of the inclined portion, means for rotating said fan, and a deflecting-hood at the rear of

said fan and coöperating with the under side of the inclined portion of said table for directing the air-current upon said lower cylinder, substantially as set forth. 40

3. In a lithographic press, the combination, with the lower blanket-carrying cylinder and upper pressure-cylinder, of a feed-table for feeding the sheet-metal plates between the 45 cylinders, a ventilating-fan located adjacent to the blanket-carrying cylinder below said feed-table, means for rotating said fan, means for interrupting the motion of said fan when not required, and a deflecting-hood adapted 50 to direct the current of air from the fan upon the blanket-carrying cylinder, substantially as set forth.

4. In a lithographic press, the combination, with the lower blanket-carrying cylinder and 55 upper pressure-cylinder, of a feed-table for feeding the sheet-metal plates between the cylinders, a ventilating-fan located adjacent to the blanket-carrying cylinder below said feed-table, means for rotating said fan, means 60 for interrupting the motion of said fan when not required, and a deflecting-hood in connection with the under side of said feed-table adapted to direct the current of air from the fan upon the blanket-carrying cylinder, substantially as set forth. 65

In testimony that I claim the foregoing as my invention I have signed my name in presence of two subscribing witnesses.

RICHARD D. BUNCKE.

Witnesses:

PAUL GOEPEL,  
C. BRADWAY.