6048X

T. Gilpin

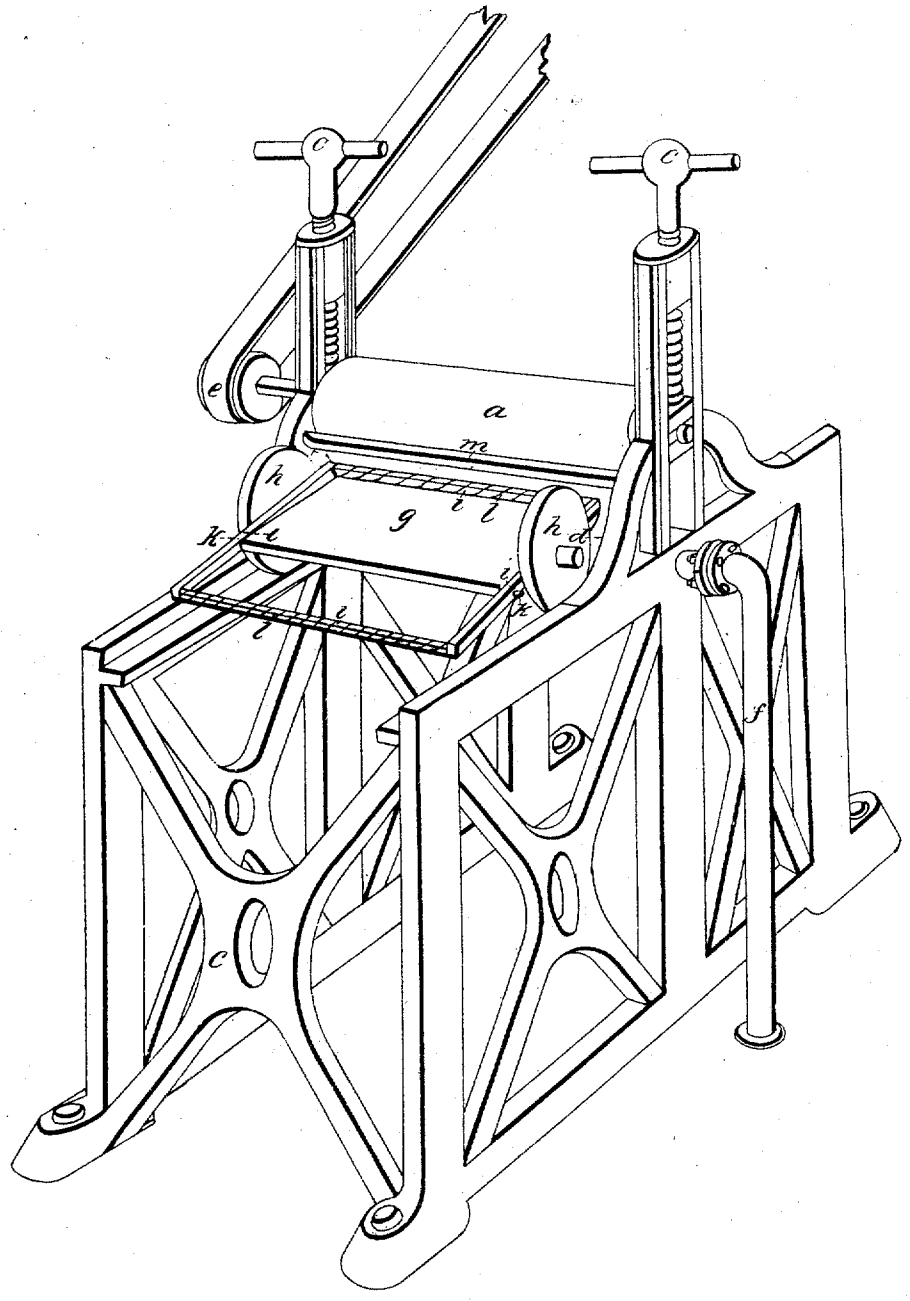
Sheet 1, 3 Sheets.

Paper Polishing Mach.

No.

Patented Jun. 25, 1830.

Fig. 1.



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T. Gilpin. Sheet 2, 3 Sheets.

Paper Polishing Mach.

No. Patented Jun. 25, 1830.

Fig. 2.

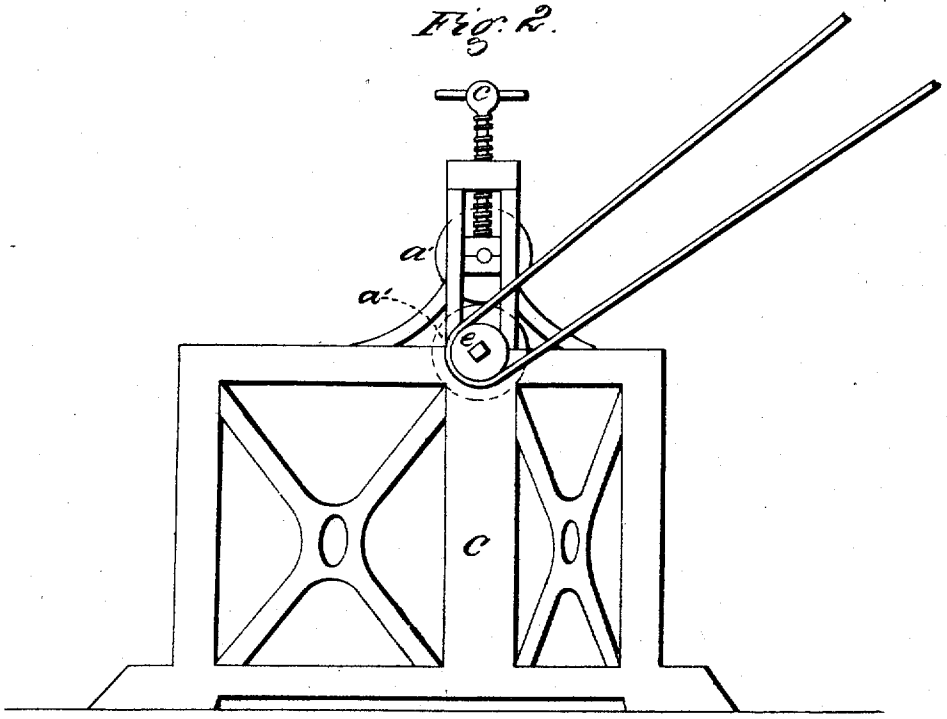
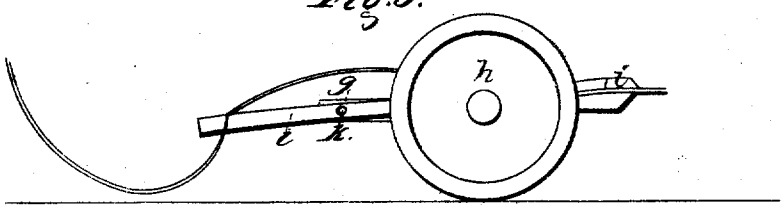


Fig. 3.



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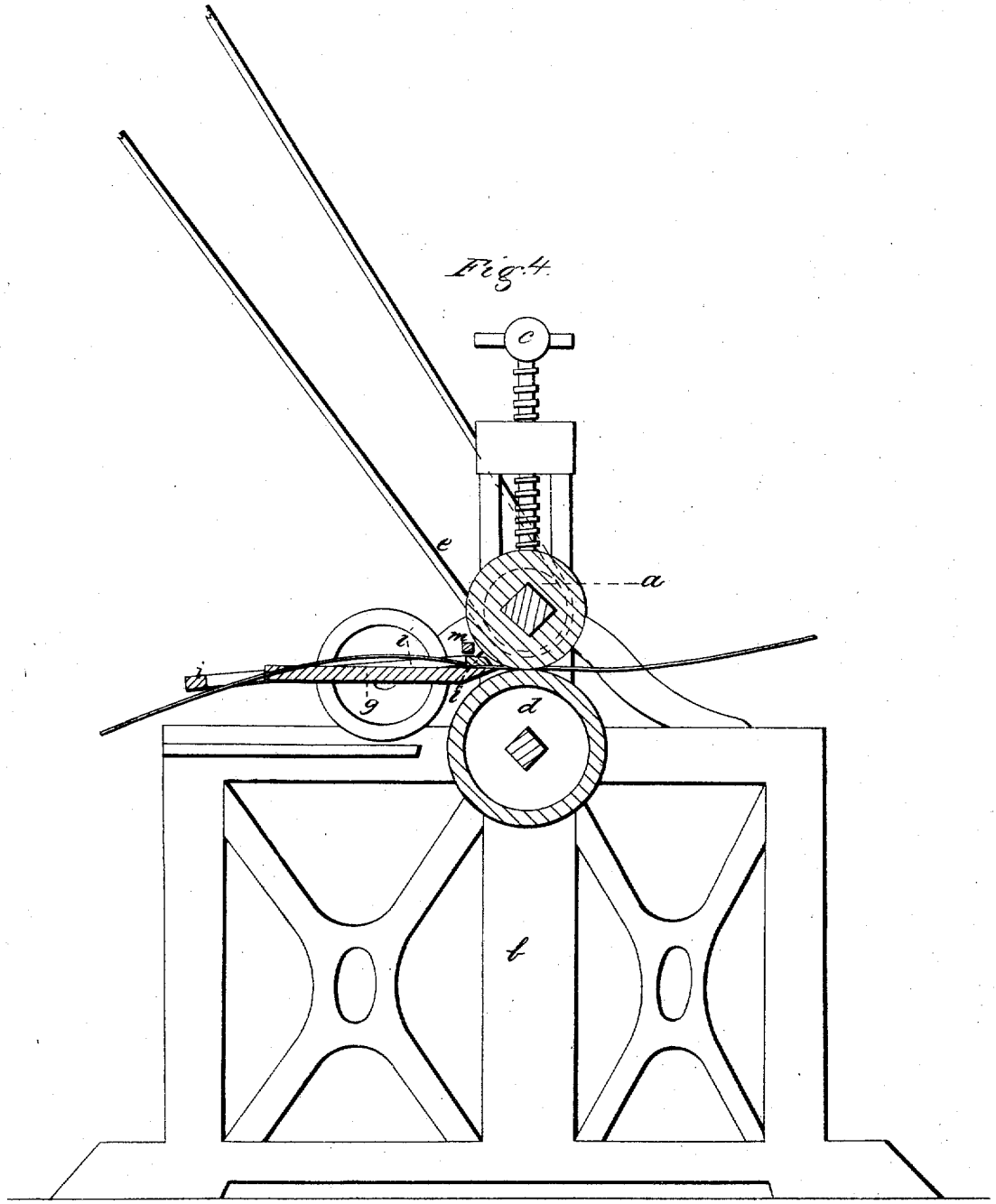
Sheet 3, 3 Sheets.

Paper Polishing Mach.

No. 9

Patented Jun. 25, 1830.

Fig. 4.



June 25. 1830

Thomas Gilpin
Extra Patent

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The schedule referred to in these Letters Patent and making part of the same containing a description in the words of the said Thomas Gilpin himself of his improvement in machinery for finishing paper.

In compliance with the provisions of the Patent Law I do describe my process invention and discovery of the art of improving and finishing paper by a rolling process of machinery to be in manner as follows to wit: I construct a roller to be made of paper compressed upon an iron shaft and then turned on the surface perfectly smooth and true in the same manner as those are made which are used for the calendering of cloth and cotton goods in the usual manner as well known, and I suspend the same in a frame usually made of iron with adjusting screws over the journals to press down the same and regulate the pressure as required. And I also provide an iron cylinder perfectly smooth on the outside but so large as to afford room to be hollow on the inside for the admission of heat conveniently; say from four to eight inches diameter and this said hollow iron cylinder is to be suspended in the same frame as the aforesaid paper roller and may be put immediately below the same, so that by the pressure of the screws the paper roller may be let down upon the same. and then when a power is applied upon a pulley in the well known usual manner either from a revolving shaft or cog wheel to the said hollow cylinder or paper roller as convenience may dictate the two rollers are to be brought into contact and will revolve together. Heat may then be introduced into the iron roller by iron or other heaters or by steam. The paper may then be passed between the two rollers and the pressure and to obtain the pressure by the usual process common my said invention. The degree of heat

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dure as well as the skill of managing the same is to the life. to the further specification of the invention. I have also constructed another machine to effect the same purpose of rolling paper. by using two papers rolled in a similar frame to the above, to move together in contact with each other. so as to admit the paper to pass between them. and in this process I either use the two papers rolled together, or I rub them with an iron roller between them. as may be most eligible — but the process I consider as analogous to the preceding. I have found it necessary also to add a useful instrument to the above invention for the purpose of securing the paper, as it is passed between the said rollers from injury by creasing or running unevenly. which instrument I call a conductor. It may be made in a variety of forms and such an instrument cannot well be done without in this application and process. The form I have used it in is by having a flat board suspended horizontally upon axles with two wheels on each side upon which the paper may be laid. I have then an open frame made to surround the said board. & suspend the same on the two sides on swivels. the one side of the open frame next to the rollers rests upon the said board and the other end or side comes underneath the said board so that it may be pressed up to it by the hand. the end next the rollers will then come down upon the board and the sheet of paper when laid upon the board is to be shoved or pushed forward upon it but under the end of the open frame which is above the board and by which it may be pressed and grasped as by a pair of tongs and kept smooth as it is drawn forward from the conductor into the rollers, — this end of the open frame board better be worsted around with a woolen cloth — The effect of squeezing or pressing the paper evenly throughout the whole sheet. so that it may be delivered in an even manner into the rollers by any hand

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process is part of my discovery, as it had never been done in any manner; — and (I describe the above as one way) I have adopted to effect it: it may be done also by pressing a straight edge or cushion up to one of the rollers and passing the sheet of paper between the straight edge or cushion, so as to gripe the paper against the roller in order to force it evenly into the action at the contact of the rollers. Another part of my invention consists in fixing a permanent iron bar or rod opposite to the contact or conjunction of the two rollers so that accidents may be prevented by things going into them or persons being caught and hurt by them. The said bar to be connected to the standard or sides of the iron frame on which the rollers are suspended

Witness
John B. Wilson
B. B. Blackistone

Thomas Bellpaire
1000 words.