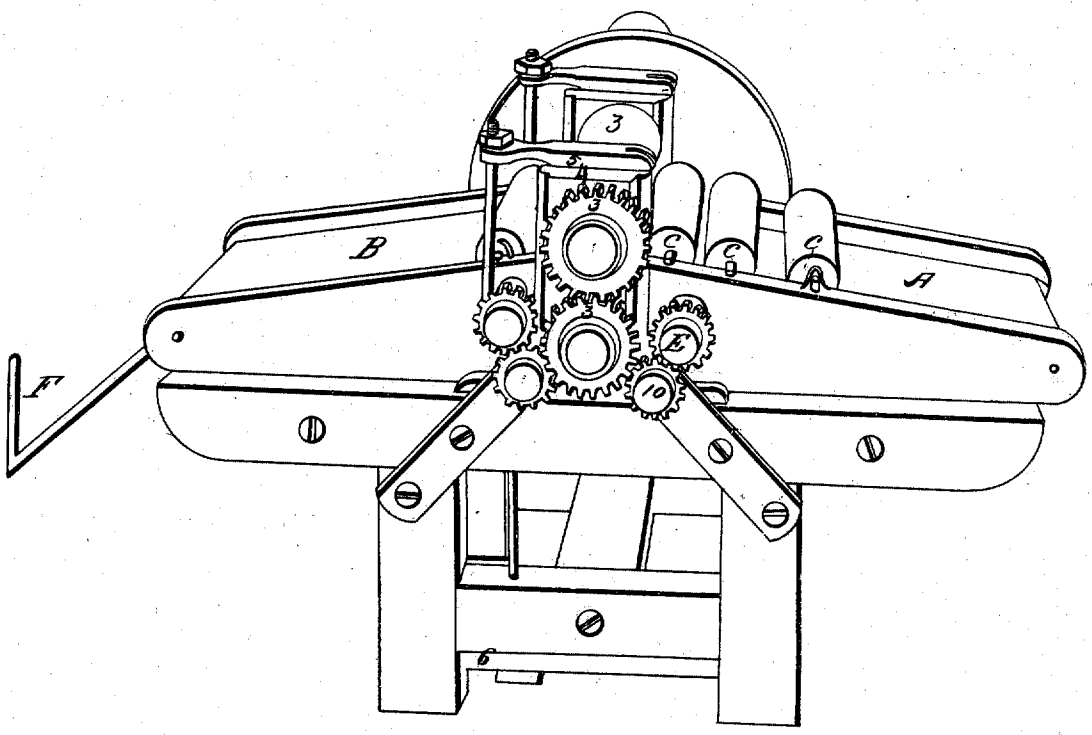
7281X

Jervis & Trenchs.

Paper Polishing Mach.

No. Patented Nov. 6, 1832.



N. PETERS, PHOTO-LITHOGRAPHER, WASHINGTON, D. C.

~~7582X~~ X7281 Oct. 6. 1852 Ex. 14 317

Ezekiel McInnis and Thos. Francis. Ithaca N. York

Letters Patent

The Schedule referred to in these Letters Patent and making part of the same containing a description of the said Ezekiel McInnis & Thomas Francis thereof by their improvement in the machine for pressing Paper called the "cylinder Hot or cold Press"

To all to whom these presents shall come

Be it known that We Ezekiel McInnis & Thomas Francis both of Ithaca in the County of Tompkins and State of New York. have invented a new and useful improvement in the art of Paper making and that the following is a full and exact description of the construction and operation of said machine as invented or improved by us. The use and object of this machine which We have designated by the name of the "Cylinder Hot or cold Press" are to press the paper after it is dryed and dried & also paper after it is printed obviating the necessity & labour of pressing each sheet between two press papers. and by placing hair and animal plates between every five or ten quires of paper and press papers. which has been the former mode of pressing paper by hand

The machine consists of two or more cylinders (2) of metal long between shoulders and six inches in diameter represented in the annexed drawing. formed of wrought or cast metal. either iron brass copper or composition turned and polished in the most perfect manner and cast or wrought hollow that they may be heated by heaters or by steam. These two cylinders are placed one directly above the other and are geared both or bowed so that the circumferences move the same . . . the bore (4) of the under cylinder is placed stationary. The upper cylinder is weighted down on the under one by a lever (3) coming over the upper box (1) to the end of which a rod is fastened. The rod is attached to a lever (6) below and has a box at the end containing weights to make the pressure between the cylinders by which the paper is pressed. The feeding table A receiving around two rollers B which are geared from the cylinders by an intermediate wheel (10) so as to carry the sheet of paper something faster than

the

1300 X 1301

surface of the cylinder moves which carries the paper under four Rollers (C) by the wheel gearing which is smooth when entering the first moving cylinder (3) Moves on the receiving table B which conveys around three Rollers which are ground from the cylinder by an intermediate wheel so as to keep the wheel fast as does the surface of the cylinder moves into a box E. The machine is placed so as to give the cylinders from the table a slowly revolutions per minute.

The sheet is placed on the feeding table A and passes under four Rollers (C) which keeps it smooth when entering the first moving cylinder 3. Moves on a moving table (B) which carries the sheet into a box E when they can be removed as occasion requires. The foregoing is a description as to dimensions of the Cylinder Hot and cold pipes now operating in the Fall Creek Paper mill Ithaca N which passes from twenty to thirty reams per day ... It is propelled with gearing and belts attached to the Water Wheel shaft.

All the cylinders are turned and polished perfectly round and smooth it will obviate the necessity of stopping paper in the usual manner and they save any great item of labour and expense in finishing paper

I will also greatly improve the quality of paper both in body & surface

Witnesses
C. F. Bierbauff
Ebn.r Mack

Ezekiel H. Jones
Thomas Jones

644 wds