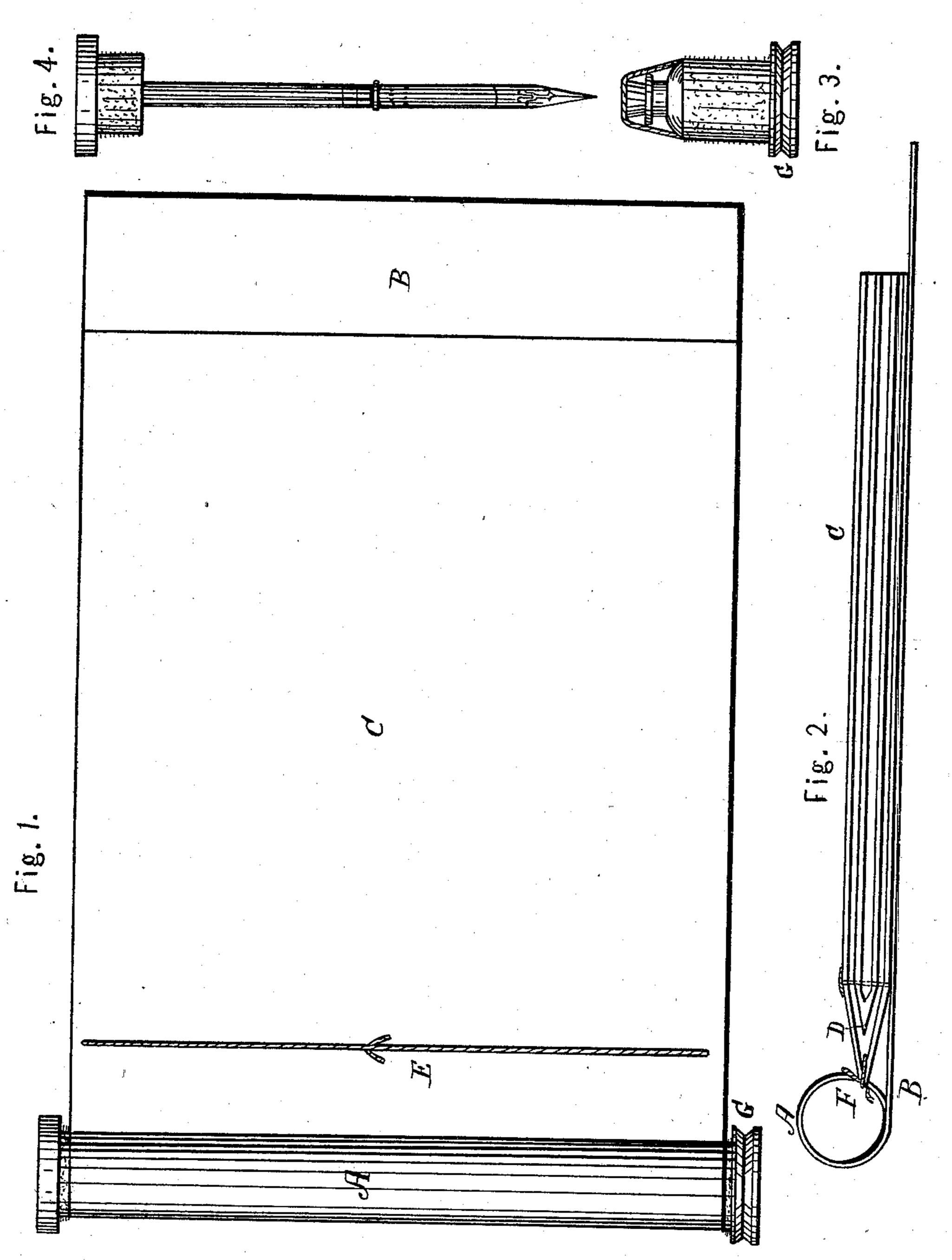
J. H. ATWATER. COPYING PRESS.

No. 31,860.

Patented Apr. 2, 1861.



Witnesses F. E. Weevel Dennis

Tooch H. Atenater By his Attorney S. Dewis &

UNITED STATES PATENT OFFICE.

JOSEPH H. ATWATER, OF PROVIDENCE, RHODE ISLAND.

PORTABLE COPYING-PRESS.

Specification of Letters Patent No. 31,860, dated April 2, 1861.

To all whom it may concern:

Be it known that I, Joseph H. Atwater, of the city and county of Providence and State of Rhode Island, have invented certain new and useful Improvements in Portable Copying-Presses; and I do hereby declare that the same are described and represented in the following specification and ac-

companying drawings.

The nature of my invention and improvements in portable copying presses consists in a book with a wedge shaped back so constructed as to wind gradually and smoothly around the cylinder, so as to take a perfect copy. Also in a cylinder or roller provided with an apron to envelop the book in copying, and in interspersing fixed leaves of thicker paper between portions of the thin copying paper in the copying book, to make it more firm and to prevent the leaves from being wrinkled in copying.

In the accompanying drawings Figure 1, is a plan of the cylinder with the book extended. Fig. 2, is a side elevation of the same. Fig. 3, is an elevation of the stopple and ink bottle. Fig. 4, is an elevation of

the stopple and pen.

In these drawings A, is a cylinder of sheet metal which may be made by bending a 30 piece of tin around a former and soldering the edges together. I then take a piece of cloth or paper of a proper size and thickness to form an apron, and apply some paste or cement to one end and apply it around the cylinder and lap it, so that it will be firmly cemented to the cylinder and form an enveloping apron or cover B, for the book C, when wound around the cylinder A. The book C, is made with a wedge shaped back, so as to wind gradually and smoothly around the cylinder by taking ten or more sheets of thin copying paper and folding them and applying a cover of some paper about as thick and stiff as common writing 45 paper. Then take a similar parcel of copy ing paper about an inch longer than the first, with a similar cover of thicker paper and apply it over the first, so that the ends of the paper opposite the folds will come 50 even. Then take a third parcel of copying paper about an inch longer than the second with a cover of thicker paper and apply it outside so that the edges opposite the fold will come even and the folded edges come 55 one within the other in succession as shown at D, in Fig. 2, and then stitch through the

whole so as to hold them all firmly together as shown in Fig. 1, at E, which completes the copying book with a wedge shaped back that will wind readily around the cylinder 60 and so smooth as to make a uniform copy. This book is greatly improved by the interspersed leaves of thicker paper, which prevent the copying paper from getting crimped or wrinkled as it might otherwise do. I 65 fasten this book to the cylinder by passing a small wire or twine through the back and through the cylinder as seen at F, and tying or otherwise fastening the ends so as to hold the back of the book to the cylinder near 70 where the apron B, joins it.

To make a copy place the writing under the first blank leaf. Then dip a thin piece of muslin in water and squeeze the water out, then spread it on the leaf over the writing and lay a piece of oiled or sized paper over the wet cloth, and roll the cylinder, so as to wind up the book and clasp it in the hands a moment, and then unroll it and if the ink is good you have a perfect copy.

I make a stopple for each end of the cylinder as shown in the drawing and apply an ink bottle to one of them as shown in Fig. 3, and perforate the inner end of the stopple Fig. 4, for the end of the penholder which 85 is inserted in it, so as to be carried safely. I cover that portion of the bottle and stopples next to the cylinder with some kind of plush, worsted plush is best, as it holds well when put into the cylinder and protects the 90 bottle from being broken and the ink from freezing. If for any cause it is desirable to carry two kinds of ink a bottle may be applied to each stopple.

I contemplate that the wedge shaped back 95 for the copying book may be made or formed by laying the edges of the leaves or sheets of paper one a little beyond the other in succession and stitch through them the same as when they are folded; or the 100 ends of the sheets may be cemented to either paper or cloth if preferred instead of being stitched. When the book is rolled up for transportation an elastic band may be applied to hold it, and when the band is re- 105 moved it may be lodged in a groove G, in

one of the stopples.

I believe I have described and represented my improvements in copying-presses, so as to enable any person skilled in the art to 110 make and use it. I will now state what I desire to secure by Letters Patent to wit.

I claim—

1. A book with a wedge shaped back substantially as described for the purpose specified.

2. In combination with a book having a wedge shaped back a cylinder or roller provided with an apron to envelop the book substantially as specified.
3. Interspersing leaves of thicker paper

between portions of the copying paper in 10 the copying book substantially as described, so as to make the book more firm and to prevent the leaves from being wrinkled.

JOSEPH H. ATWATER.

Witnesses:

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