## K. MCKENZIE.

## Apparatus for Cutting out Garmen

No. 163,674.

Patented

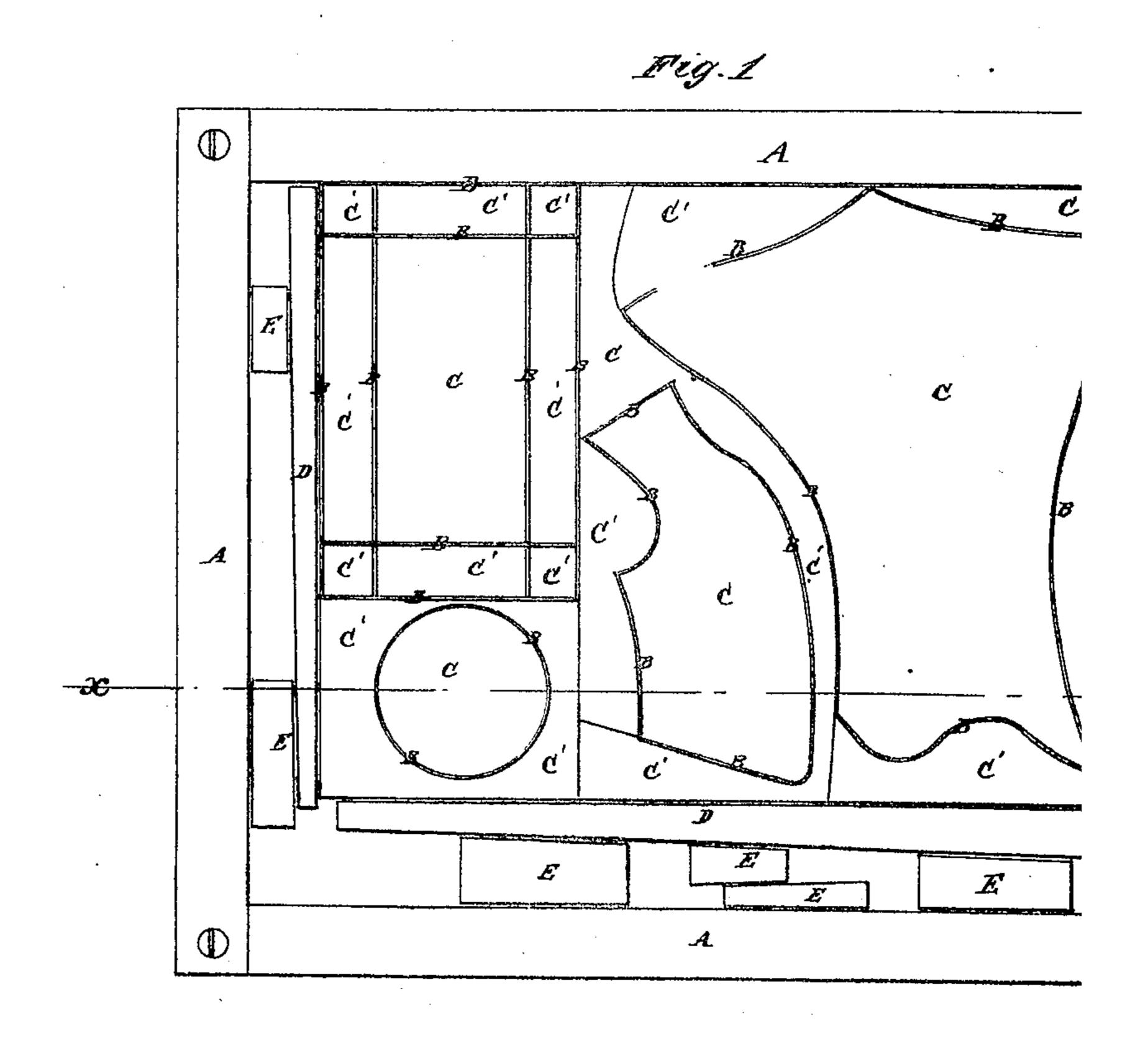
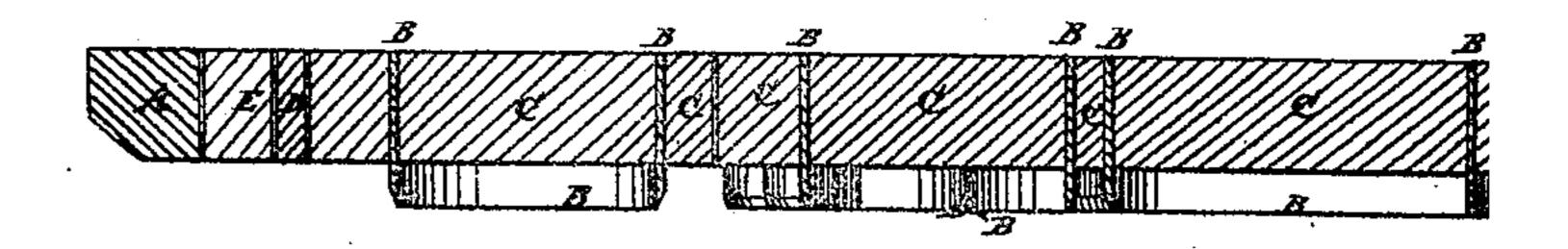


Fig. 2



WITNESSES:

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## UNITED STATES PATENT OFFICE.

KENNETH MCKENZIE, OF HAMILTON, CANADA.

## IMPROVEMENT IN APPARATUS FOR CUTTING OUT GARMENTS.

Specification forming part of Letters Patent No. 163,674, dated May 25, 1875; application filed October 24, 1874.

To all whom it may concern:

Be it known that I, KENNETH MCKENZIE, of Hamilton, in the county of Wentworth, Province of Ontario and Dominion of Canada, have invented a new and useful Improvement in Dies for Cutting Cloth, Leather, &c., of which the following is a specification:

Figure 1 is a view illustrating my invention, and showing dies of various forms. Fig. 2 is a detail cross-section taken through the line x x, Fig. 1.

Similar letters of reference indicate corresponding parts.

The invention will first be fully described,

and then pointed out in the claim.

A is a strong iron frame, similar to a printer's chase. B are the cutters, which are thin flexible strips of steel, similar to printers' rules, but with sharp edges. For cutting irregular forms a kerf of the desired form is cut in a pattern-block, C, of wood, with a band-saw. The rules B are then fitted into the kerf, and the block or blocks C are secured in the frame or chase A by side and foot sticks D, interfilling pieces C', and wedges or quoins E, in the same way as type are secured in a chase in making up a form.

For cutting regular forms, or when a great number of pieces of the same form and size are to be cut, a number of these metal blocks C', of the proper shape, may be used to hold the rules B. When part of a line of cut is to be scored or creased, and the rest of said line is to be cut through, the scoring-rules should be made a little narrower than the cutting-rules, so that their edges will not project quite so low. As thus constructed the dies may be used upon an ordinary printing-press, or upon any other kind of a press that has the requisite power.

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

Patent—

The combination, with chase A, of cutters B, pattern - blocks C, interfilling blocks C', foot-sticks D, and quoins E, as and for the purpose specified.

KENNETH MCKENZIE.

Witnesses:

A. L. SMITH, JAMES DUNLOP.