

(No Model.)

W. H. GRIFFITHS.
AUTOGRAPH REGISTERING MACHINE.

No. 460,389.

Patented Sept. 29, 1891.

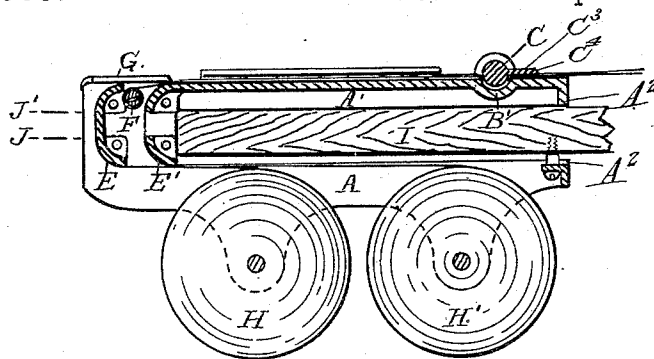


Fig. 1.

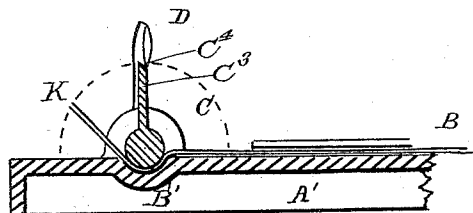
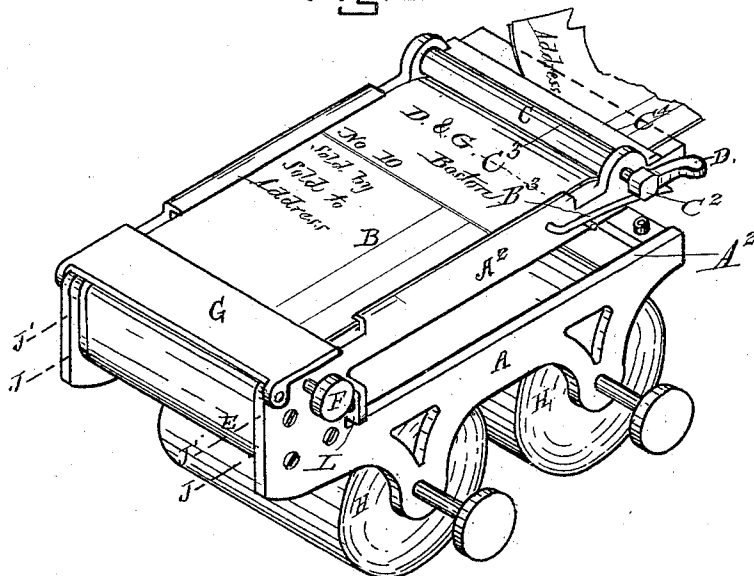


Fig. 2.



WITNESSES.

Fig. 3.

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AUTOGRAPH REGISTERING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 460,389, dated September 29, 1891.

Application filed April 27, 1891. Serial No. 390,699. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM H. GRIFFITHS, of Medford, in the county of Middlesex and State of Massachusetts, have invented new and useful Improvements in Autograph Registering or Copying Machines, of which the following is a full, clear, and exact description.

This invention in autograph registering-machines consists in the construction, combination, and arrangement of parts substantially as hereinafter described and claimed.

In the drawings, forming part of this specification, Figure 1 is a central longitudinal vertical section. Fig. 2 is an enlarged sectional view in detail. Fig. 3 is a perspective view.

In the drawings, A A' are respectively the lower and upper parts or sections of the supporting-frame of the machine. Each section A A' in part consists of vertical and parallel side frames suitably joined together, and between the upper edges of the side frames of the lower part A and the lower edges of the side frames of the upper part A' there is an unobstructed opening A², from side to side and from one end of both parts to the inside cross or guide piece E' of two separated vertical cross or guide pieces E' E, which at their opposite ends are fastened to the side frames of the two parts A A', thereby joining their ends opposite to their open ends, as stated. Each cross or guide piece E E' is vertically rounded off at and along both its upper and lower corners or edges, and the rounded upper edge of the inside guide-piece E' preferably meets tangentially a horizontal table or platform B, covering the whole length and width of the upper part A'.

B' is a groove, in cross-section semicircular, and extending across the table B of the upper frame A' and near the open end of the frames A A'.

C is a bar shown as a roll. This roll C lies within the groove B', and at each end portion it is hung by axles, so as to be free to turn in ear-pieces B² at opposite sides of the table B. One roll-axle has a peripheral square-sided head C², making bearing for the free end of a bent spring B³, that at its opposite end portion is fastened to the side of the upper frame A' and all so that the spring will hold the

roll against accidental turning, while allowing it to be turned by hand, using a handle D, which is provided for that purpose. This roll C has a projecting and longitudinal blade C³, which by a turn of the roll can be placed to lie across and at rest on the table at either side of the roll. This blade has its outer edge C⁴ preferably beveled off, the better thereby to serve as an edge along which to tear off the paper sheets, as hereinafter appears.

G is a plate located at the joined end of the upper and lower frames A' A and hinged to the upper frame so as to be swung over and upon the table B, and thereby in the first instance to serve as a rest for and protector of the hand from the upper paper sheet on the table and in the second instance to enable the carbon-sheet and paper sheets, all of which are under said hand-rest G, to be adjusted, all as hereinafter appears.

F is a slotted rod crossing from side to side and hung on the side frames of the upper frame A' and located between the cross-pieces E E' at the joined end of the two frames A A'. This rod F carries a carbon-sheet, which is entered into the slot of and thereby held on the rod. This carbon-sheet passes along the table B to near the roll C and lies upon a paper sheet from a roll H of paper and is covered by a paper sheet from a roll H' of paper. Both paper sheets are continued beyond the end of the carbon-sheet and entered between the roll C and the groove B' of the table B. The rolls H H' of paper are supported and arranged, as well known, to freely turn on the lower part A of the frames A A', and the paper sheet of each thence passes up around the rounded upper and lower guide-pieces E E' of the frames to and upon the table B, as explained.

Fig. 1 shows the device described on a support I—such as a store counter or table—of suitable shape to practically fill the opening between the upper and lower frames and presenting the upper frame above and the lower frame under the support. The device is placed on the support I by first entering it at its open end onto the support I at its edge and then sliding it over and along the support, and preferably bringing its closed end into abutment against the edge of the support where, if so desired, the machine may be fast-

ened against accidental movement by entering screws (not shown) or other suitable fastening devices through ear-pieces L of the lower frame, one at each side of the joined ends of the frames. With the paper sheets and carbon-sheet on the table B, as explained, all writing or marking then made on the upper sheet is transferred autographically by the carbon-sheet below onto the under paper-sheet, and having completed the writing or marking the end portions of the paper sheets projecting beyond the roll are then grasped by the fingers and together pulled forward between said roll C and the groove B' for a sufficient length to present fresh portions of the paper sheets to the carbon, on which the portions of the paper sheets written on, as stated, are torn off as and along a line coincident with the edge of the roll-blade C³, Fig. 1, which is then in suitable position and acts as a guide therefor. Before pulling the paper sheets forward, as explained, the roll C is placed with its blade uppermost, Fig. 3, by which the projected ends of the paper sheets are inclined upward, and so made most convenient in position to be grasped. Before tearing the paper sheets the roll C is swung down onto the paper sheets beyond the roll, thereby presenting the beveled edge of its blade for a guide and edge along which to tear off the projected portions of the sheets. When marking or writing on the paper sheets, as stated, the blade may be placed at a rest on the paper sheet or table inside of the roll, and thereby hold the paper sheets against rising upward or near the roll. The roll C, in co-operation with the groove B' of the table, depresses the paper sheets below the surface of the table, and so serves to hold them and the carbon-sheet flat on the table and to prevent all looseness in either of them, while allowing the paper sheets to be pulled forward when desired, it being preferable when this is done to have the blade of the roll off from a bearing on the paper sheets. The upper section or part A' of the two-part frame described is serviceable and useful independently of the lower section or part A, and it can be separated, for instance, along line J' from said lower frame without interference with or alteration of any of its working features. The upper part, being separated, as stated, can be placed at any place desired on a counter or table or other suitable such like support, provided, of course, that the counter, &c., at the place of location of the frame A', is adapted by slotting it for paper sheets to be supplied to the table B from under the counter, passing around the rounded edges on the frame A' of the cross-pieces E E'. With the upper frame A' separated and in use, as

stated, the lower frame can also be utilized for supporting the paper sheets by properly placing it in position therefor under the counter.

J represents a line, along which the lower frame may be separated from the upper frame and yet retain on said lower frame, as also on the upper frame, the rounded edges of the cross-pieces E E' of each frame.

Having thus described my invention, what I claim, and desire to secure by Letters Patent, is—

1. In a machine for autographically transferring writing or marking made on one paper sheet to another paper sheet by means of a carbon-sheet placed between them, a frame consisting of upper and lower parts A' A, joined at one end and having a longitudinal and transverse opening between and separating them at their ends opposite to said joined ends, and separated guide-pieces E E', located at the joined end of said frame, in combination with spindles H H' for the rolls of paper held and turning on said lower part of the frame, and a carbon-sheet at one end held between said guide-pieces, substantially as described, for the purposes specified.

2. In a machine for autographically transferring writing or marking made on one paper sheet to another paper sheet by means of a carbon-sheet placed between them, the combination of a table on which one end of said several sheets are entered and are disposed lengthwise one upon the other, and which has a transverse groove at its end opposite to that at which said sheets are entered on it, and of means adapted to hold said carbon-sheet and to allow it to be disposed between said paper sheets on said table, with a roll held and turning on and adapted to enter into said groove of said table, substantially as described, for the purposes specified.

3. In a machine for autographically transferring writing or marking made on one paper sheet to another paper sheet by means of a carbon-sheet placed between them, the combination of a table on which one end of said several sheets are entered and are disposed lengthwise one upon the other, and which has a transverse groove at its end opposite to that at which said sheets are entered on it, and of means adapted to hold said carbon-sheet and to allow it to be disposed between said paper sheets on said table, with a roll held and turning on said table and adapted to enter into said groove, and with a blade projected from and extending lengthwise of said roll, substantially as described, for the purposes specified.

WILLIAM H. GRIFFITHS.

Witnesses:

EDWARD W. HAYES,
H. W. HAYES.