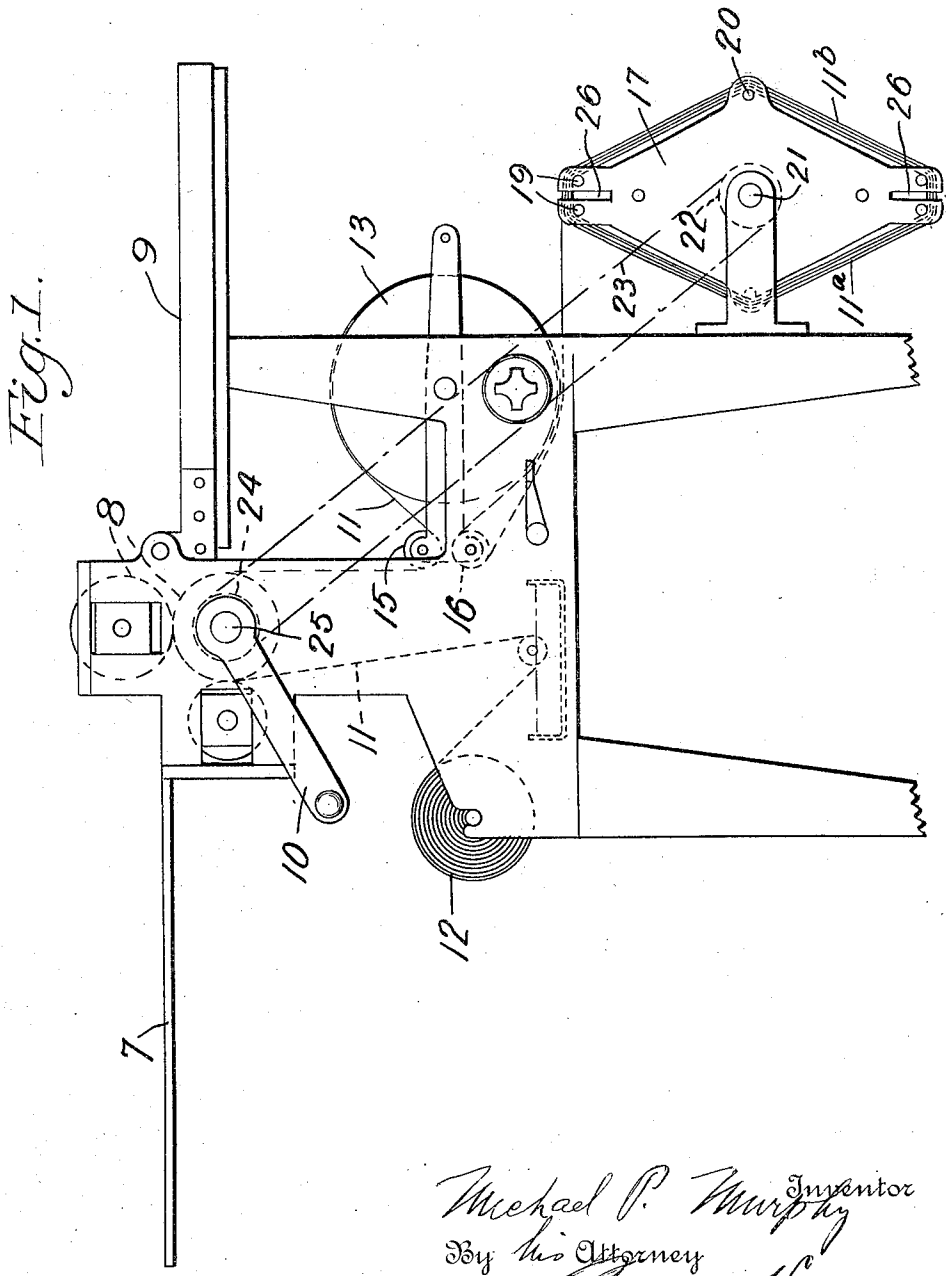
Aug. 12, 1924. 1,504,896

M. P. MURPHY

DUPLICATING MACHINE

Filed Aug. 21, 1920 2 Sheets-Sheet 1

Fig. 1.



Michael P. Murphy Inventor

By his Attorney

Frank J. Kent

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Fig. 2.

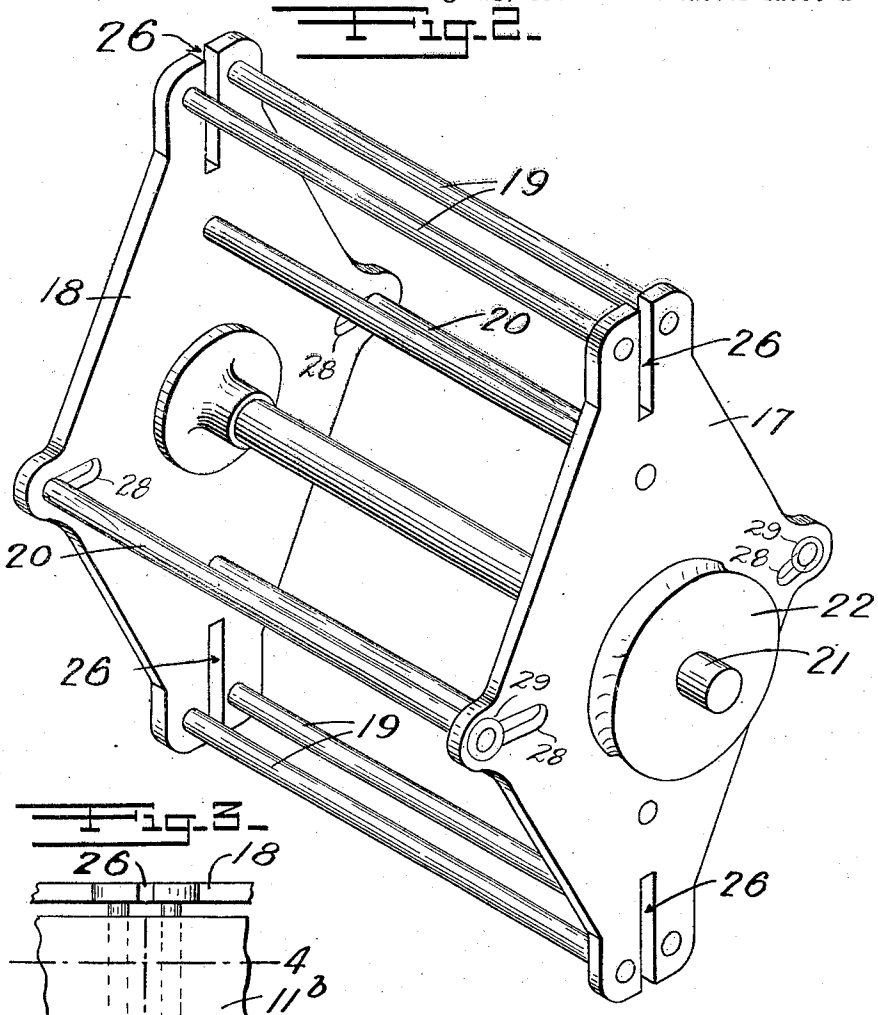


Fig. 3.

Fig. 5

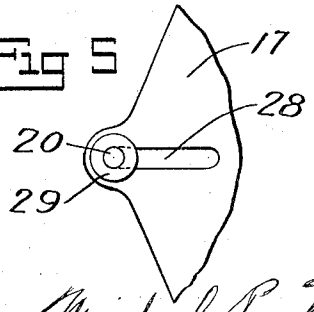
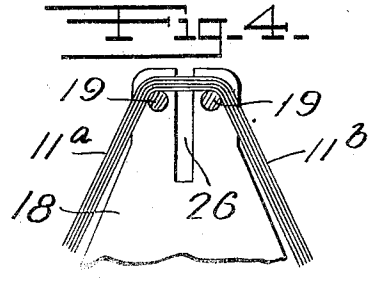


Fig. 4.



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Frank J. Hunt

Patented Aug. 12, 1924. 1,504,896

UNITED STATES PATENT OFFICE.

MICHAEL P. MURPHY, OF NEW YORK, N. Y.

DUPLICATING MACHINE.

Application filed August 21, 1920. Serial No. 405,008.

To all whom it may concern:

Be it known that I, MICHAEL P. MURPHY, a citizen of the United States, residing at New York, in the county of New York and State of New York, have invented certain new and useful Improvements in Duplicating Machines, of which the following is a specification.

My present invention relates to apparatus for making and preserving copies of letters and other documents.

The objects of the invention are to enable the copying of letters and the like on a continuous web of copy paper and to facilitate the severance of said web at the end of the copying operations into sheets of the proper length.

In the accompanying drawings I have illustrated the invention embodied in one of its practical and preferred forms and have indicated certain modifications, but wish it understood that further modifications and changes may be made without departure from the true spirit and scope of the invention as herein defined in the claims.

In the drawings referred to—

Figure 1 is a broken side view of a copying or duplicating machine having features of my invention incorporated therein;

Figure 2 is a detached perspective view of a modified form of reel on which the copying web is wound;

Figure 3 is a fragmentary top plan view of the reel with a portion of the web thereon;

Figure 4 is a sectional view of the same as taken on substantially the plane of line 4—4 of Figure 3;

Figure 5 is a broken detail view of the modified construction of the reel.

The duplicating machine illustrated in Figure 1 is shown as of typical construction embodying a feeding table 7 for the letters, a pair of copying rolls 8 and a receiving table 9. The copying rolls are turned by a handle 10 or other suitable means, and the letters or other papers are copied, in this instance, on a continuous web 11 supplied from the roll 12 and passing over a guide roll 12′ to and between the copying rolls 8.

The impression is made on this copying web in its passage, for the letter, between the copying rolls. In the machine shown the web is then passed about a suitable drying roll 13, being directed to and about the same by means of guiding rolls 15 and 16.

After the copies are thus made on the web, the web is wound on a take-up or storage device shown in the form of a roll having end heads 17 and 18 of elongated construction connected at the ends by the pairs of spaced rods 19 and at the sides by the rods 20. The heads of the roll are carried by a suitable supporting shaft 21 which is shown in Figure 1 as driven by a pulley 22 and belting 23 from a pulley 24 on the shaft 25 of the copying roll 8; or a chain and sprockets may be substituted for the belt and pulleys.

In Figure 1 I have illustrated how, as the sprockets are made, the web is wound in built-up layers on the storage reel. This reel is preferably so designed that the sections 11^a and 11^b of the webbing at opposite sides of the major axes of the reel are each approximately equal to the length of the letters or other papers ordinarily copied. This means that a letter length of the web will stand at each side of the reel, so that by severing the web on the major axes the web will be separated into separate sheets, each carrying a copy of the letter.

This separation of the web into letter size sheets is provided for by slotting the ends of the reel heads between the spaced web-supporting rods 19, as indicated at 26 to enable the insertion of a knife or other cutting instrument beneath the web at these two diametrically opposite points. One of these lines of severance is indicated by the dash-and-dot line 27 in Figure 3.

From the foregoing it will be seen that as the letters or other papers are passed through the machine copies will be automatically transferred to the web, and this web, after being dried, will be wound on the take-up reel. At the end of a day's work or at any other time the letter copies may be separated and removed from the machine by simply severing the web passing over the spaced supporting-rods of the reel, the slots in the ends of the reel facilitating this operation and serving as ends for the severing or cutting tool.

At times it may be found necessary to adjust the reel for the purpose of properly positioning the letter copies at the opposite sides of the lines of severance. This may be accomplished by adjusting the supporting rods 20 radially or toward and away from the centre of the reel. This is provided for in the construction shown in Figures 2 and 5 by mounting the ends of the rods in sub-

stantially radial slots 28 in the heads of the reel and by securing the same at variously adjusted positions in said slots by thumb screws or other clamping devices 29. It will be seen that by adjusting these rods outward or inward in such bearings the length of the section of webbing at one side or the other of the reel may be increased or diminished as required. This makes the invention readily adaptable for letters or documents of different length and allows for adjustments to properly register the copies on the reel.

I claim:

1. A reel for a web of copying material having end heads provided at diametrically opposite points with outwardly opened guide slots, and web-supporting rods connecting said end heads and disposed at opposite sides of the guide slots to support superimposed layers of the web in position to be severed by a cutting implement inserted in the slots aforesaid.

2. A reel for a web of material having end heads provided with outwardly opened slots, web supporting rods connected with said end heads, certain of said rods being disposed at opposite sides of the slot to support layers of the material in position to be severed by a cutting implement inserted within the slot and beneath the material, and other of said supporting rods being radially adjustable on the heads to vary the sheet length of the material on the reel.

In testimony whereof I affix my signature.

MICHAEL P. MURPHY.