

Aug. 4, 1936.

F. W. STORCK

2,049,877

BLOCK-OUT SYSTEM AND DEVICE

Filed June 25, 1934

3 Sheets-Sheet 1

*Fig. 1.*

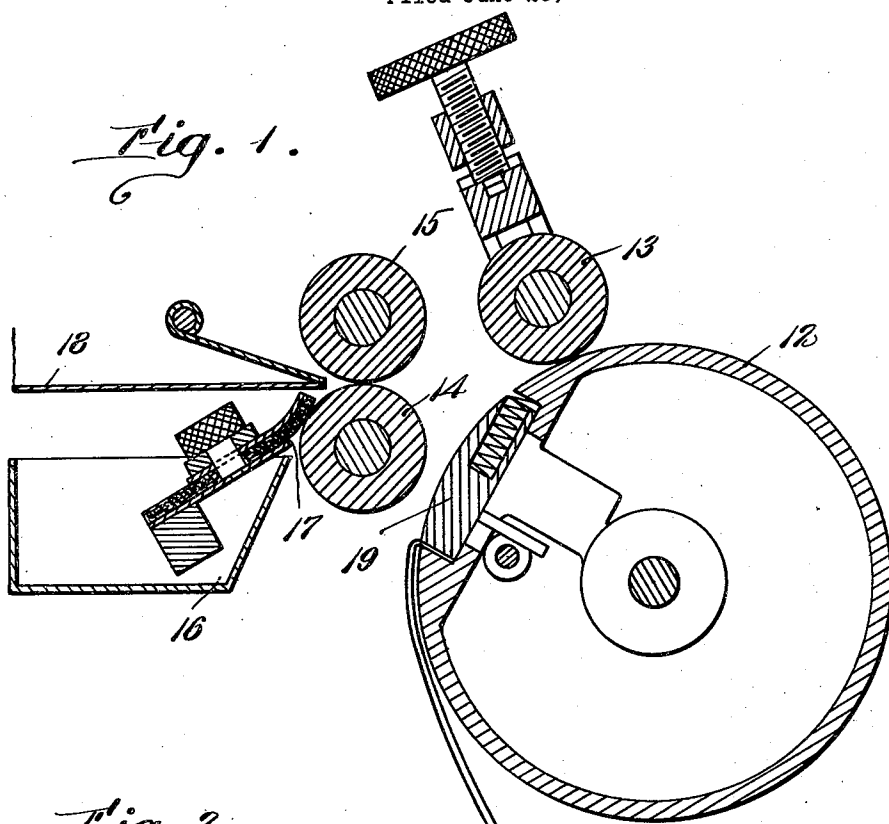
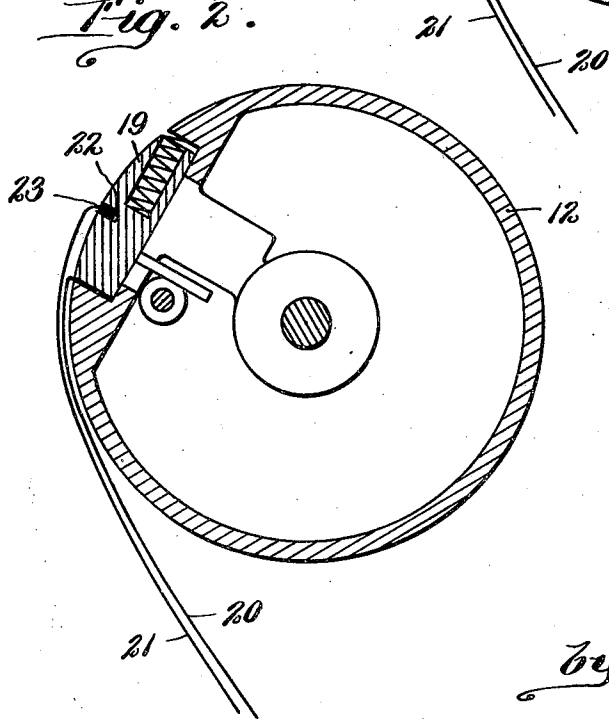


*Fig. 2.*



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*Fig. 4.*

19

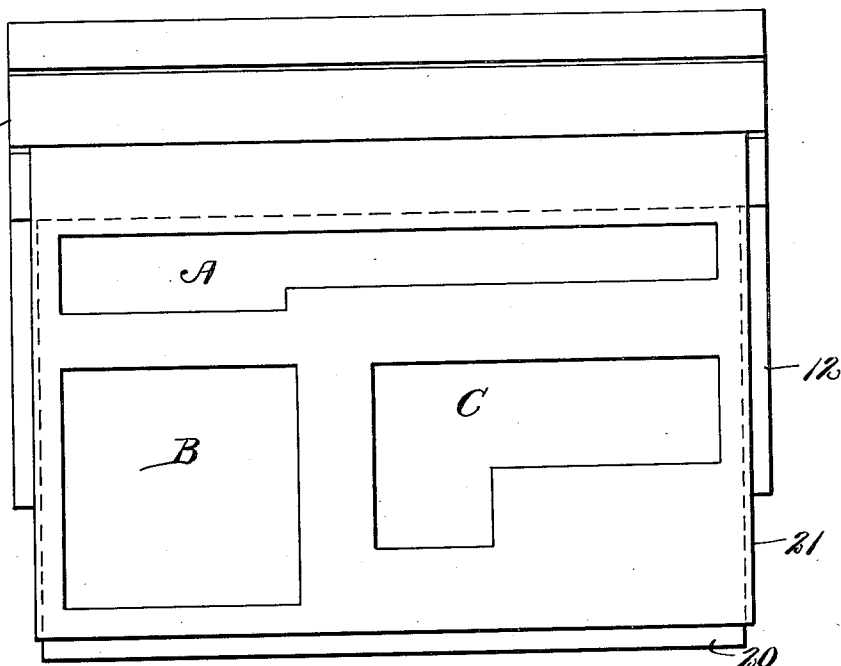
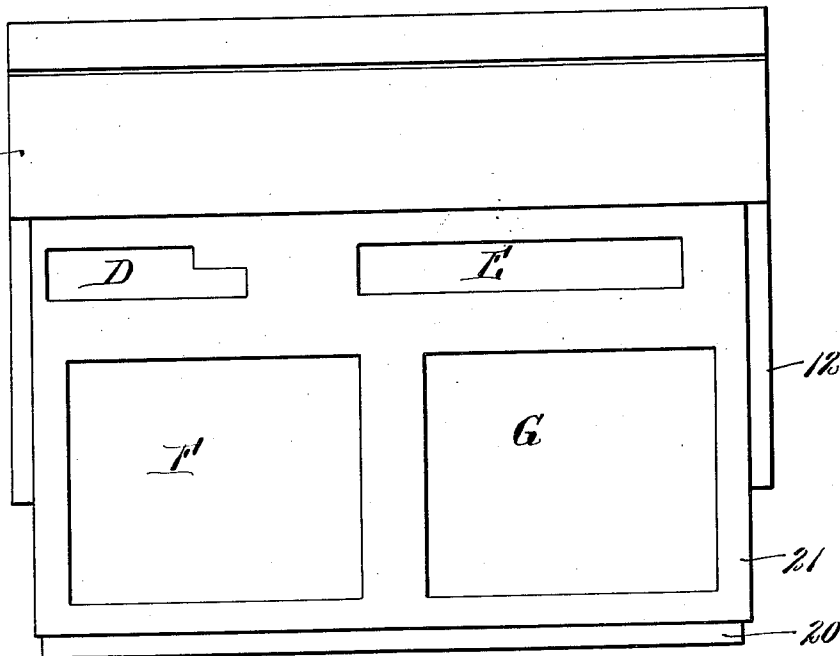


*Fig. 3.*

19



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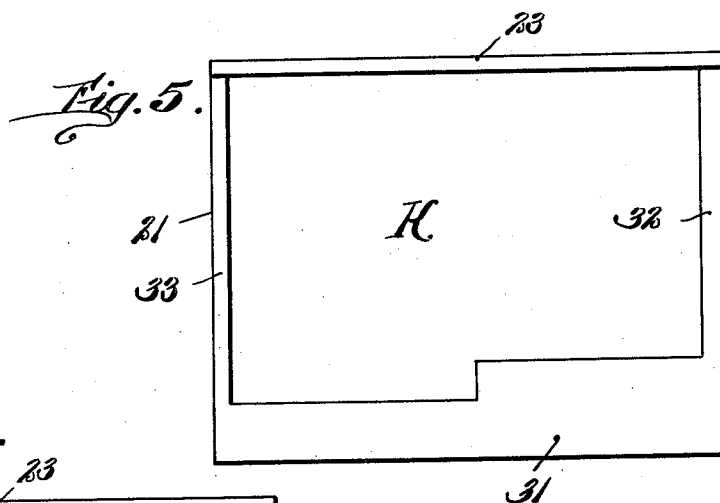
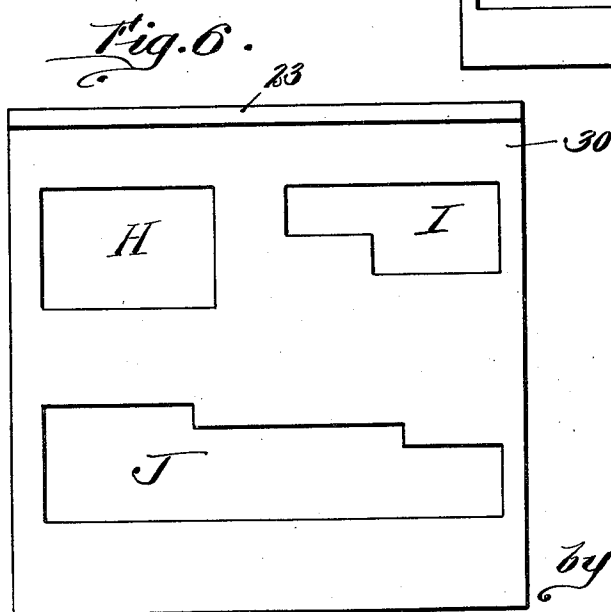
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BLOCK-OUT SYSTEM AND DEVICE

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3 Sheets-Sheet 3



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## UNITED STATES PATENT OFFICE

2,049,877

## BLOCK-OUT SYSTEM AND DEVICE

Frederick W. Storck, Arlington, Mass., assignor  
to Standard Mailing Machines Company,  
Everett, Mass., a corporation of Massachusetts

Application June 25, 1934, Serial No. 732,326

5 Claims. (Cl. 101—132)

My invention relates to a method and devices whereby selected portions of the master copy used in making duplicate copies from the master copy, may be covered and the selected portions blocked out and not duplicated. This method and the devices are particularly desirable in making duplicates of selected portions of business records, especially when it is not desirable to disclose all the information imprinted on the record.

10 The objects of my invention are as follows:

To provide block out covers of the size and shape to cover the selected portions of the imprinted matter on the master copy; to provide means to hold the block out covers so they can be quickly attached to and detached from the printing drum of a duplicator, and so they will accurately register on the master copy and block only the selected portions of the imprinted matter; to provide a block out device that can be attached to the drum of the duplicator completely independent of connection to the master copy if desired, and to produce a form of block out cover whereby several block out covers of different sizes and shapes may be used in connection with one master copy, and by the use of which several duplicates can be made from one master copy, each having different portions of the imprinted matter printed thereon.

There are three types of duplicators in general use, one by which duplicate copies are made from a stencil, another wherein the master copy is imprinted on a gelatin film and the type of duplicator with which my improved block out cover is to be used. In the stencil and gelatin types of duplicators, the block out covers are usually attached to the master copy by adhesion, the surface of the stencil and gelatin film being of a sticky nature so the block out covers will adhere to them. In what is known as the wet process duplicators with which my improved block out covers are to be used, it is not practical to attach the block out covers to the master copy for many reasons.

In selecting material from which to make block out covers, it is preferable to use a non-absorbent material when a number of copies are to be made from one master copy in a short period of time, in such case the block out cover is liable to absorb the moisture from the moist clear sheets and take up the ink from the master copy and impair its usefulness.

In the drawings accompanying this specification and forming a part thereof:

Fig. 1 is a diagrammatic sectional end view of the printing drum of a duplicator as shown in co-

pending application made by me July 21, 1930, Serial No. 469,501. This view shows one method of attaching a block out cover to the printing drum of a duplicator.

Fig. 2 is a sectional end view of the drum of a duplicator which shows another method of securing a block out cover to the printing drum of a duplicator.

Fig. 3 is a side view of the printing drum of a duplicator showing both the master copy and the block out cover as clamped in the clamping device of the printing drum, with the block out cover lying loosely over the master copy.

Fig. 4 is a side view of the printing drum of a duplicator and a plan view of a block out cover held in a groove formed in the periphery of the printing drum.

Fig. 5 shows one form of a block out cover.

Fig. 6 is a form of block out cover having a bar attached by which it can be secured in a groove in the periphery of the printing drum of a duplicator.

In the drawings 12 is the printing drum of a duplicator, and 13 is the pressure roll for pressing the clear sheet of paper against the master copy in the operation of making duplicate copies.

The roll 14 is a combined feeding and moistening roll which cooperates with the roll 15 to feed the clear sheets to contact with the master copy in the process of duplicating the matter imprinted on the master copy. 16 is a container for the moistening fluid and 17 is a wick which is immersed in the moistening fluid and positioned to contact with the roll 14 and thereby moisten the clear sheets as they pass between the rolls 14 and 15.

18 is a shelf to support the clear sheets so they can be fed to the rolls 14 and 15.

The printing drum 12 is provided with a spring controlled clamping device 19 adapted to clamp the master copy 20 to the printing drum 12. As shown in Fig. 1 both the master copy and the block out cover 21 are secured to the printing drum by the clamp 19 and so the block out cover lays outside the master copy.

Fig. 3 shows a preferred means of securing the block out cover to the printing drum. By this means the block out cover is provided with the bar 23, Figs. 5 and 6, which bar is adapted to be frictionally held in the groove 22 formed in the clamp 19. The groove 22 may be formed in the periphery of the drum 12 and function the same.

In Fig. 5 is shown a block out cover 21 formed with a very large opening with the cover portion 31 connected to the bar 23 by the narrow strips 32

and 33. In Fig. 6 is shown a block out cover 30 to illustrate one of the many forms of openings that may be employed to block out selected portions of a master copy.

5 The reference letters A B C D E F G H I J K indicate the openings in the block out covers 21, designed to expose the portions of the master copy 20 which is to be duplicated.

10 If it is desired to make but a few duplicate copies at a time from one master copy, any material such as paper or the like may be used from which to make the block out covers 21. When a number of copies are to be made from one master copy, it is preferable to use a water proof material such as waterproofed paper, cloth, metal  
15 and the like.

I am aware that block out covers have been used heretofore in the art of printing, they have also been used in connection with duplicators in  
20 which master copies made in the form of stencils and of gelatin films on which the matter to be duplicated is imprinted, in which portions of the imprinted matter are blocked out by placing block out covers on the surface of the master  
25 copy to which they will adhere due to the sticky nature of such master copies. In the case of block out covers used with wet process duplicators, it is not practical to attach the block out covers to the master copy for two reasons, one  
30 because the pressure exerted by the presser roll is so great that it will displace the block out cover, the other reason is, that it will impair the usefulness of the master copy.

When a number of copies are made from one  
35 master copy, each having different portions of the imprinted matter, it is not commercially practical to attach the block out cover to the master copy, it consumes too much time to attach and align each block out cover, then again there is the  
40 liability of their being displaced and spoiling the record being duplicated.

In the use of my system of block out covers in a manufacturing or commercial plant or in any other business where records of their transactions  
45 are kept, one master copy can be made and any number of duplicate copies can be made from it, the copies may be of all the imprinted matter, or by using my system of block out covers, a number of copies may be quickly made each having a  
50 different portion of the imprinted matter. By

my method, one master copy can be made having imprinted thereon a complete record of each transaction, the portions of such record required by each branch or department can then be selected by my system of block out, quickly duplicated on separate sheets and distributed.  
5 Through the use of my system of block out covers, any number of differing copies can be made from one master copy at a high rate of speed. Further it requires no special skill to operate a duplicator in using my improved system of block  
10 out covers as they are self aligning and can be easily and quickly attached and detached.

What I claim is:—

1. In a device for blocking out selected portions  
15 of the imprinted matter of a master copy used in a duplicating machine, comprising a block out holder bar adapted to extend lengthwise of the printing drum of a duplicator and adapted to be frictionally held in a slot in the periphery of the  
20 printing drum and a block out cover of the size and shape to cover the selected portion of the imprinted matter secured to said holder bar.

2. In a device for blocking out selected portions  
25 of the imprinted matter of a master copy used in a duplicating machine, comprising a bar adapted to frictionally engage in a slot in the periphery of the printing drum of a duplicator and a block out cover of the size and shape to cover said selected portions attached to said bar.  
30

3. In a duplicating machine, a printing drum having a bar for clamping a sheet to the drum and a longitudinal groove for frictionally holding a second sheet relative to said first sheet.

4. In a duplicating machine, a printing drum  
35 having a bar for clamping a sheet to the drum, a longitudinal groove in said bar for frictionally holding a second sheet relative to said clamped sheet.

5. In a duplicating machine, a printing drum  
40 having a clamp for securing a sheet thereto, a longitudinal groove associated with said drum and clamp, a bar member adapted to be frictionally engaged in said groove, a flexible body portion secured to said bar member and whereby said  
45 bar may be moved longitudinally within said groove to dispose said body portion relative to said sheet.

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