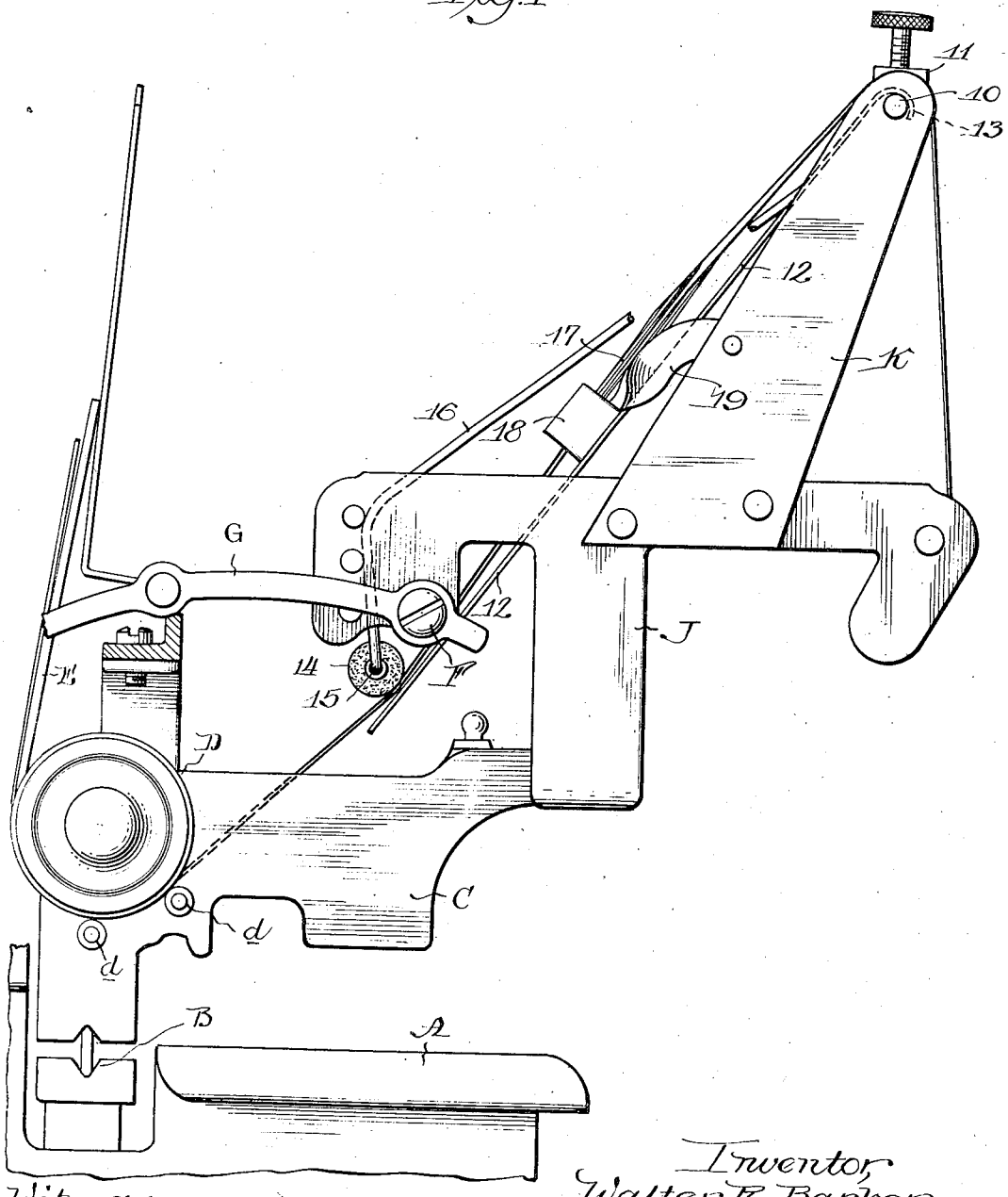
Jan. 6, 1925. 1,522,223

W. R. BARKER

MECHANISM FOR FEEDING CONTINUOUS PAPER STRIPS TO TYPEWRITERS

Filed Jan. 25, 1924 3 Sheets-Sheet 1

Fig. 1



Witness:
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Inventor,
Walter R. Barker,
By Thomason, Rodhouse & Lundy atty.

Jan. 6, 1925. 1,522,223

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MECHANISM FOR FEEDING CONTINUOUS PAPER STRIPS TO TYPEWRITERS

Filed Jan. 25, 1924 3 Sheets-Sheet 2

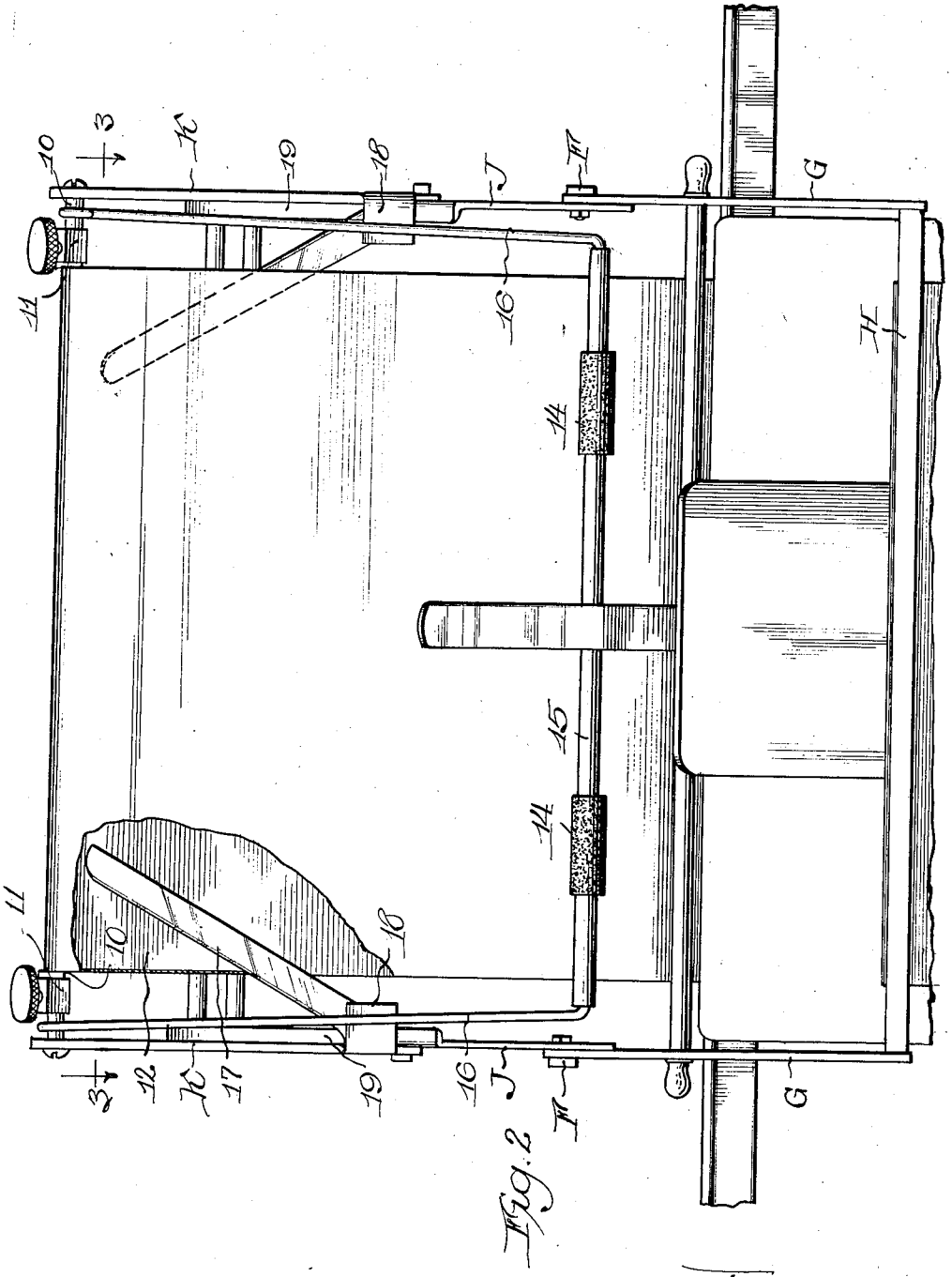


Fig. 2

Witness:
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MECHANISM FOR FEEDING CONTINUOUS PAPER STRIPS TO TYPEWRITERS

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Fig. 3

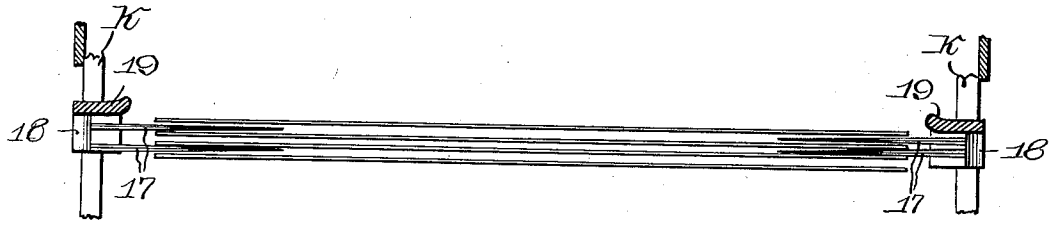


Fig. 4

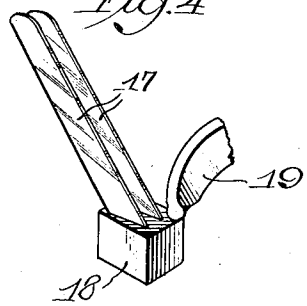


Fig. 5

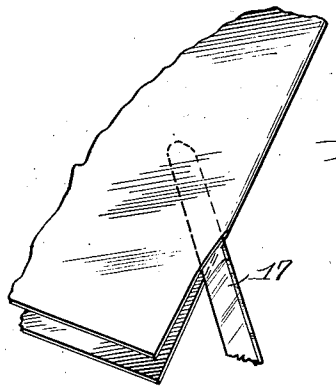


Fig. 6

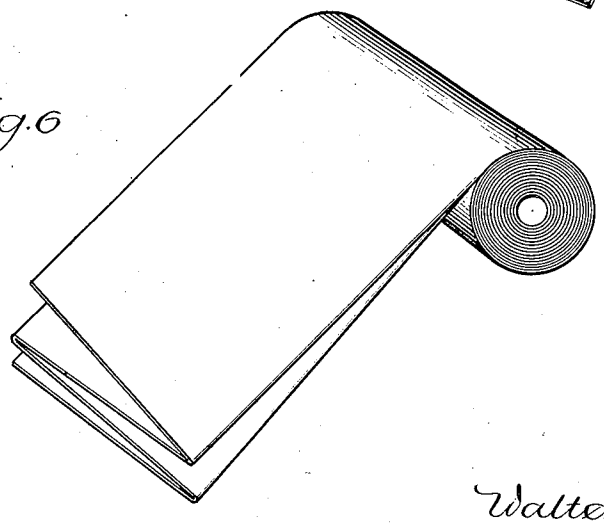
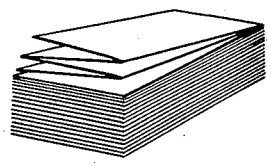


Fig. 7



Inventor,
Walter R. Barker.

Witness
Chas. R. Lourish.

By Thomason, Rochouse & Lundy Attys.

Patented Jan. 6, 1925. 1,522,223

UNITED STATES PATENT OFFICE.

WALTER R. BARKER, OF CHICAGO, ILLINOIS, ASSIGNOR TO UNITED AUTOGRAPHIC REGISTER COMPANY, OF CHICAGO, ILLINOIS, A CORPORATION OF ILLINOIS.

MECHANISM FOR FEEDING CONTINUOUS PAPER STRIPS TO TYPEWRITERS.

Application filed January 25, 1924. Serial No. 688,460.

To all whom it may concern:

Be it known that I, WALTER R. BARKER, a citizen of the United States, and a resident of Chicago, county of Cook, and State of Illinois, have invented certain new and useful Improvements in a Mechanism for Feeding Continuous Paper Strips to Typewriters, of which the following is a full, clear, and exact description, such as will enable others skilled in the art to make and use the same.

My present invention relates to typewriter machines and means for feeding paper in a strip or strips to the carriage and platen thereof where the same may be written upon and then the desired length of paper severed from the strip or strips. More particularly, my present invention relates to feeding a continuous strip of paper that has been previously folded back and forth longitudinally and rolled upon a spool or core and which is sheared or cut at the folded edges prior to the entry of the sheared strips into the carriage of the typewriter.

In paper feed mechanisms, in which a plurality of sheets or continuous strips are fed in superposed relation, it frequently occurs that the strips, one or more of them, will slip longitudinally or transversely and get out of alinement so that the forms which are printed upon the respective strips will not be in registry, and consequently when matter is typewritten upon the original or outer strip it will not appear in the corresponding blank spaces upon the manifolded copies. I have found that by providing a wide strip of paper and folding the same back and forth upon itself longitudinally, the forms will be maintained in registry with each other more readily than where the strips are fed from separate rolls. In the mechanism of this character, it is desirable, however, to shear the paper at the folded edges just prior to their entry into the carriage in order to receive the manifolding material. This will permit the printed forms to be discharged from the typewriter in separate superposed strips, and all that the operator need do after one form has been completed is to tear the strip laterally at the lower edge of each printed form so that duplicate, triplicate or any number of manifold copies may thus be obtained.

One of the objects of my present invention resides in providing effective means for receiving the longitudinal folded sheet of paper in a continuous strip from a roll or spool of the same, cutting or separating the edges at the folds, and feeding it through the type-writer carriage so that it may be written upon. Other objects reside in providing simple means for carrying out the before-mentioned objects, which will operate in a dependable manner and which is novel in construction, as well as dependable in operation.

I prefer to carry out the several objects of my invention in substantially the manner hereinafter fully described, and as more particularly pointed out in the claims, reference being made to the accompanying drawings that form a part of this specification, in which:—

Figure 1 is a vertical side elevation of the upper portion of a typewriter machine showing the application of my invention thereto.

Fig. 2 is a front elevation of the structure shown in Figure 1.

Fig. 3 is a fragmentary horizontal section taken on line 3—3 of Figure 2.

Fig. 4 is a perspective of the cutting knives for separating the strip at the folded edges thereof.

Fig. 5 is a fragmentary perspective showing the operation of the cutting knives or blades.

Fig. 6 is a perspective, somewhat schematic, of a roll of paper such as is employed in making the original and manifold copies.

Fig. 7 is a perspective, somewhat schematic of the folded paper in a pack.

The drawings show a typical or preferred embodiment of my invention, and I have employed similar reference characters to designate like parts wherever the same occur throughout the several views.

The typewriter illustrated herein is of a well-known make and comprises a main frame or body A having thereon a track B upon which is longitudinally moved the usual reciprocable carriage C, and mounted upon this carriage so as to rotate upon its axis and transverse to the movement of the carriage is the horizontally disposed cylindrical platen D which is engaged by friction wheels *d* to move the paper through the machine. Mounted upon the carriage in front of the platen is a paper shield or guard E against which the discharged por-

tion of the paper strips will rest after leaving the platen. Pivotally mounted upon transverse pins F is a pair of arms G that extend forwardly of the carriage and are connected at their outer ends to a cutter bar H that extends across the front of the strips of paper interposed between said cutter bar and the shield or guard E and maintains the paper against the latter. The pins F which support the arms of this cutter bar project from T-shaped brackets J mounted at the opposite ends of the carriage and extend above the latter, and said brackets each have upwardly extended rearwardly inclined arms K.

Extending horizontally between said arms K is a rod 10 over which the folded paper strips are adapted to be fed and which is guided by means of adjustable stops 11 that may be moved longitudinally upon the rod to space them apart approximately the width of the strip or folded sheet being fed into the machine. A guide plate 12 is mounted upon and depends from the rod 10, the upper end 13 of said plate being bent over rearwardly to provide a lock that is engaged with the rod in the manner shown in dotted lines in Figure 1. This plate 12 extends downwardly towards the platen and terminates a short distance therefrom, and the paper is maintained against the same by means of a presser device, which latter consists of friction rollers 14 mounted intermediate the ends of a horizontal rod 15 that is connected by means of the extensions 16 having loops or eyes at their upper ends that surround the rod 10 at the upper ends of the arms K and permit a pivotal movement of the structure. Intermediate their ends the extensions 16 are bent obliquely as seen in Figure 1 so that their lower portions are disposed substantially vertical, this being done for the purpose of clearing the cutter blades which project from the arms K toward the paper.

As seen in Figure 5, the paper is preferably an elongated sheet that is folded longitudinally back and forth upon itself, and the same is printed with suitable forms and notations such as are used in the sales tickets, bills-of-lading, etc. The paper, after being printed and folded, is rolled upon the suitable spool or folded in a pack and the end is placed over the rod 10 between the guide blocks 11 and then extends down over the plate 12, past the cutters and into the carriage between the platen and the feed rollers *d*. The cutters comprise two sets of parallel blades 17 mounted at their ends in holders 18 secured to the ends of irregularly shaped brackets 19 that extend out from the upright arms K so that the blades extend onto the plate 12 from each side thereof and spaced from the plate so that the blades extend obliquely beyond the folded edges of the paper strip. The blades have their cutting edges faced upward and towards the edges of the paper so that when the paper is moved downwardly by the paper feed mechanism and platen the folded portions will be engaged with the knife edge of the blades and be severed so as to provide a plurality of separated strips of paper of the desired width of the sale ticket or bill-of-lading and having printed thereon the desired form.

Thus it will be seen the sheet is maintained in its folded condition until immediately before it reaches the feed mechanism of the typewriter so that the forms printed on the sheet will be kept in registry until the separate tickets are torn off along the cutter bar H.

What I claim as new is:—

1. In combination with a typewriting machine having a longitudinally reciprocable carriage and a platen rotatable therein, a frame secured to and supported solely by said carriage, a supporting plate upon said frame and inclined upwardly away from said platen, a paper web folded longitudinally back and forth upon itself and movable over said plate, and cutters supported by said frame and engaged with the folded edges of said web while the latter is being moved upon said plate whereby to slit said web into separate strips that are received and fed by said platen.

2. In combination with a typewriting machine having a longitudinally reciprocal carriage and a platen rotatable thereon, a frame secured to and supported solely by said carriage, a supporting plate upon said frame and inclined upwardly from adjacent said platen, a paper web folded longitudinally back and forth upon itself and movable over said plate, obliquely disposed cutters supported by said frame above said plate and engaged with the folded edges of said web while the latter is being moved upon said plate whereby to slit said web into separate strips that are received and fed by the platen and means between the cutter and platen for maintaining the paper in contact with said plate.

3. In combination with a typewriting machine having a longitudinally reciprocable carriage and a platen rotatable thereon, a frame supported by and movable with said carriage, a supporting plate upon said frame, a paper web folded longitudinally back and forth upon itself and movable over said plate, adjustable guides upon said frame between which the paper web passes, cutters supported by said frame and engaged with the folded edges of said web while the latter is being moved upon said plate whereby to slit said web into separate strips that are received and fed by said platen, and a member pivotally mounted upon said frame and

having its lower portion urged towards the plate to engage the web between the cutters and the platen.

4. In combination with a typewriting machine having a longitudinally reciprocal carriage and a platen rotatable thereon, a frame supported by and movable with said carriage, a supporting plate upon said frame and inclined upwardly from adjacent said platen, a paper web folded longitudinally back and forth upon itself and movable over said plate, adjustable guides upon said frame between which the paper passes, obliquely disposed cutters supported by said frame above said plate and engaged with the folded edges of said web while the latter is being moved upon said plate whereby to slit said web into separate strips that are received and fed by said platen, and a member pivotally mounted upon said frame and having its lower portion urged towards the plate to engage the web between the cutters and the platen.

Signed at Chicago, county of Cook and State of Illinois, this 15th day of January, 1924.

W. R. BARKER.