E. J. BARKER.

TYPE WRITER.

APPLICATION FILED SEPT. 11, 1905.

912,525. Patented Feb. 16, 1909.

3 SHEETS—SHEET 1.

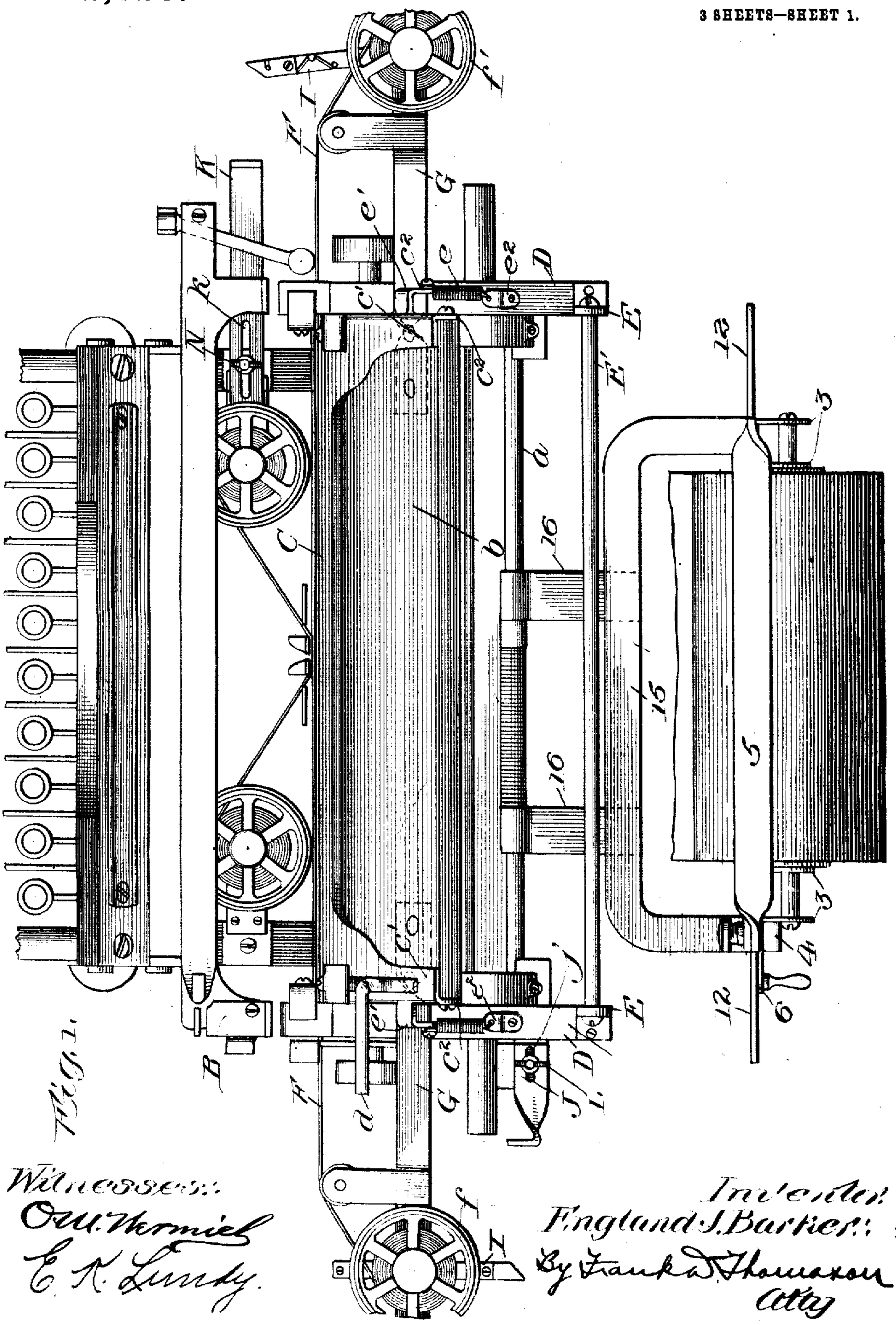

FIG. 1.

Witnesses:
O. W. Hermiel
C. K. Lundy.

Inventor:
England J. Barker:
By Frank A. Thomason
Atty

E. J. BARKER.

TYPE WRITER.

APPLICATION FILED SEPT. 11, 1905.

912,525.

Patented Feb. 16, 1909.

3 SHEETS—SHEET 2.

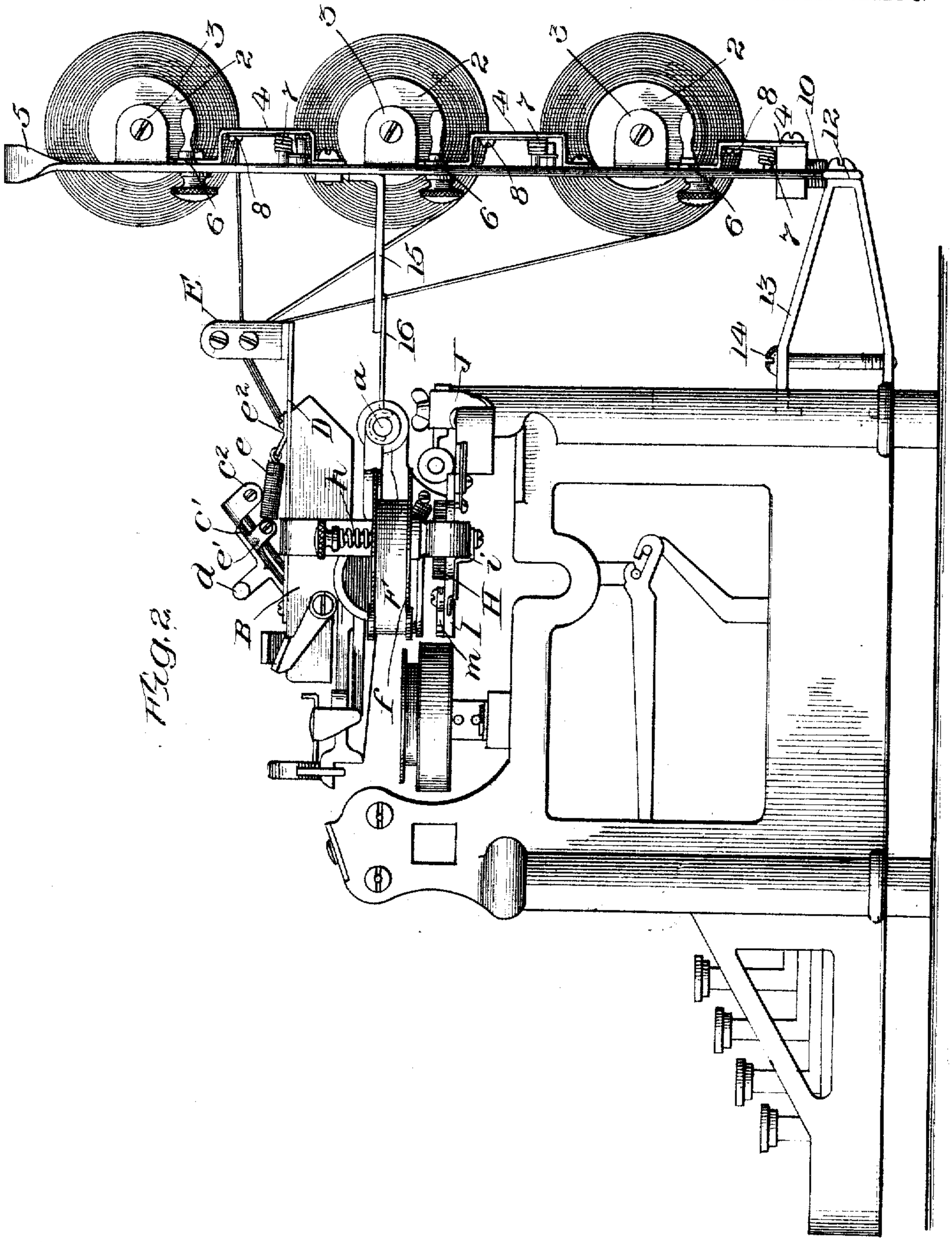

Fig. 2.

Witnesses:
Ow. Hermick
E. K. Lundy

Inventor:
England J. Barker:
by Frank D. Thomson
Atty.:

E. J. BARKER.

TYPE WRITER.

APPLICATION FILED SEPT. 11, 1905.

912,525.

Patented Feb. 16, 1909.

3 SHEETS—SHEET 3.

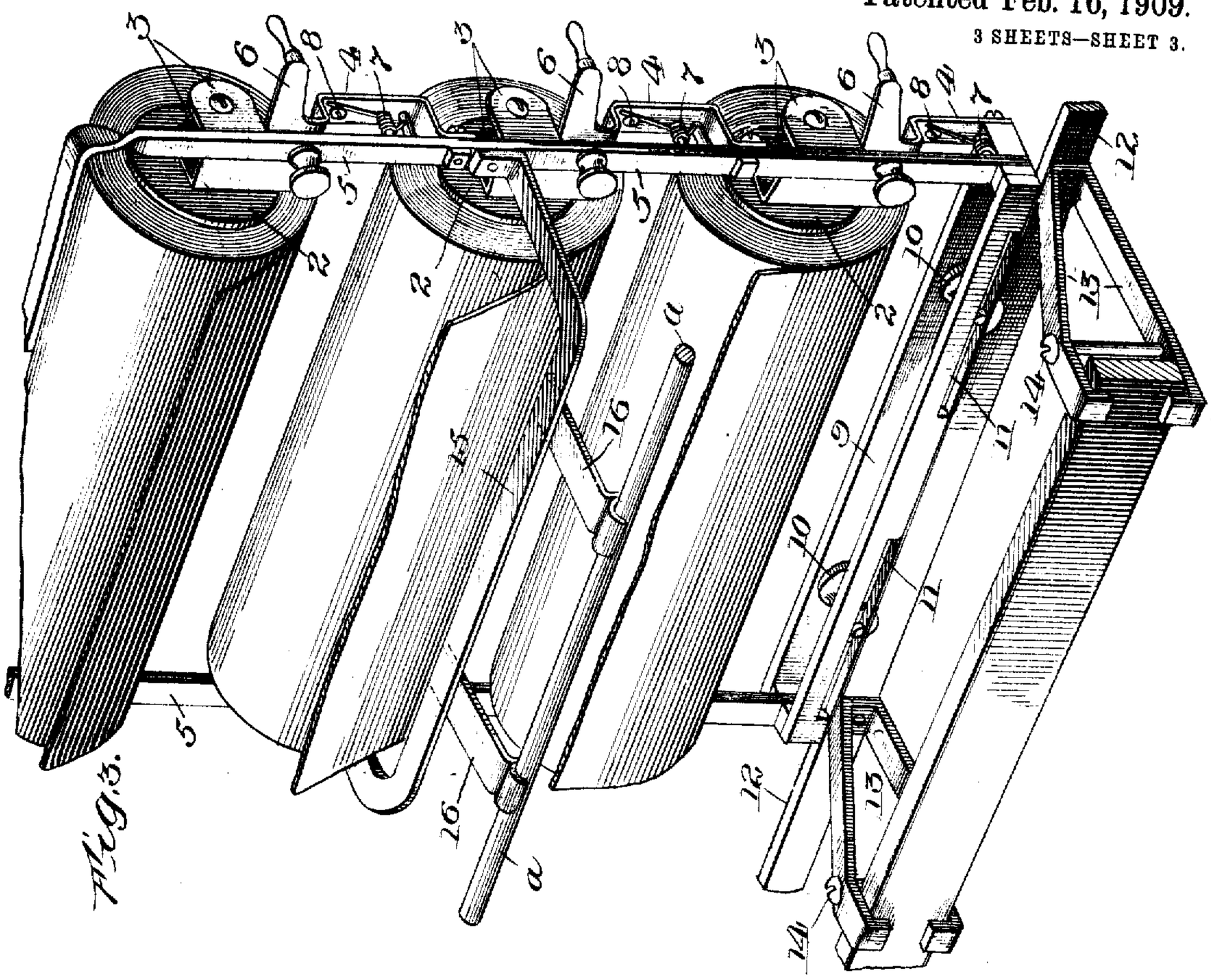

Fig. 3.

Witnesses:
O. M. Hornick
E. K. Lundy

Inventor:
England J. Barker:
by Frank D. Thomason
Atty:.

UNITED STATES PATENT OFFICE.

ENGLAND J. BARKER, OF MORGAN PARK, ILLINOIS.

TYPE-WRITER.

No. 912,525. Specification of Letters Patent. Patented Feb. 16, 1909.

Application filed September 11, 1905. Serial No. 277,982.

To all whom it may concern:

Be it known that I, ENGLAND J. BARKER, a resident of Morgan Park, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Type-Writers, of which the following is a clear, exact, and complete description.

The object of my invention is to provide means for supplying one or more continuous webs of paper to the longitudinally reciprocal platen of a typewriter from rolls which are journaled in a vertical frame that is supported independently of the carrier in which said platen is journaled, but reciprocated therewith by virtue of means that removably connect it thereto. This I accomplish by the mechanism hereinafter fully described and as particularly pointed out in the claims.

In the drawings:—Figure 1 is a plan view of a typewriter having my invention applied thereto. Fig. 2 is a side elevation thereof. Fig. 3 is a perspective view of the rack in which the rolls of paper have bearings, removed from the typewriter but illustrating the manner in which it is removably secured thereto.

Referring to the drawings A represents a suitable supporting-frame, and B the transversely reciprocal carrier. The framework of the carrier is, preferably, rectangular, and its ends are connected at the rear of the machine by a longitudinal bar *a*, and near the front of the machine by a rearwardly inclined shield *b*. The shield *b* is placed over the platen *c*, journaled in the ends of the carrier, and it is arranged in the usual manner at a tangent to the circumferential sides of said platen so as to strip the typewritten work therefrom. A longitudinally disposed cutter-blade C is placed flatwise against and in front of the lower portion of the shield *b*, but is separated therefrom a sufficient distance to permit of the work, as it is delivered from the platen *c*, to pass between it and the shield. The cutter-blade is considerably narrower than the shield, and its upper edge is sharpened to facilitate the tearing off of the paper when it is desired to remove it from the machine. The ends of this cutter-blade project upwards and form arms *c'* thereof, the upper side edge of the upper portions of which are provided with downturned pivotal lugs c^2, that are pivotally connected to the ends of the shield adjacent to its upper edge. The arms *c'* at one end of the blade C is provided with a suitable finger grasp *d*, by means of which the blade, C, can be raised or lowered, and at a suitable point adjacent to the pivotal lugs c^2 its ends are provided with lugs *e'*, which are connected by means of contraction springs *e* to a suitable strap e^2, secured to the upper edge of the ends of the carrier above the portion of the flat metal strips D secured direct to the upper edge of the carrier, as shown. The action of the springs *e* upon the cutter-blade is such as to hold it securely in its position against the shield, or, when raised and moved to the limit of its rearward movement, holds it in the latter position.

The rear ends of the strips D extend to the rear of the carrier, and have mounted upon and secured to their rear end portions, standards E, which are connected by an upper and lower horizontal guide-bar E', E', between which the paper strips pass from the feed rollers in transit to the platen.

I prefer to use three rolls of paper in connection with a typewriting machine when my improvements are applied thereto. These rolls of paper are of suitable width and are arranged and located parallel to each other in the same vertical plane. Their ends are suitably journaled in stationary centering devices at one end and at the other to centering-plates 2 on the ends of spindles which are journaled in lugs 3—3, carried on and projecting rearwardly from the upper ends of suitable frames 4, which latter are pivoted at their lower ends to a perpendicular inverted U-shaped frame 5. Near their upper ends these frames 4 are provided with hand-grasps 6, and their upper ends are kept pressing toward the said rolls by means of springs 7, which are wound upon the stud projecting to the rear from the vertical frame 5, and at one end held to said supporting-frame in a suitable manner, and have the other and longer end projecting upwards and bearing against a pin 8 projecting inwards from said frame 4, which latter, at this point, is bent or bowed to the rear to provide space for and to accommodate the presence of spring 7. When it is desired to insert or remove the roll of paper all that it is necessary to do is to swing the frame 4 laterally and thus move the center-

ing plate out of engagement with the adjacent end of the same.

The lower ends of the inverted U-shaped vertical frame 5 are secured to and between the longitudinal sills in a truck 9. This truck is provided with concave rollers 10, 10, near its end, which comes between the side-sills of the truck, and has its journals engage recessed treads 11, made in the under edge of the said slits of the truck. The rollers of the truck travel on a suitable rail or track 12, consisting of a horizontal bar, which is supported out a suitable distance from the rear of the supporting-frame, by means of a truncated V-shaped clamp 13, the forward separated clamping arms of which have their extremities hooked or turned toward each other, and are adapted to clamp the rear lower rail of the supporting-frame A of the machine, by means of bolts or screws 14, substantially as shown in Figs. 2 and 3 of the drawings. About midway its height the inverted U-frame 5 has a yoke 15 secured to and projecting horizontally forward therefrom. The portion of this yoke, extending substantially parallel to the axis of the paper rolls, has two corresponding hooks 16, 16, projecting forward from it, which are located a sufficient distance apart and have their hook-shaped ends caught over and around the longitudinal bar *a* connecting the ends of the carrier. The weight of the paper rolls and their supporting mechanism and the grip of the hooks 16 on the bar *a* of the carrier, are sufficient to cause the truck and the paper rolls supported thereby to move back and forth on track 12 simultaneously with the carrier, but at any time should it be desired to feed ordinary letter heads, legal cap, or separate sheets of paper to the machine, the said truck and paper rolls can be easily and quickly removed from the machine.

In order to reproduce a manifold or carbon copy of the original work upon one of the additional sheets of paper fed to the machine, I employ an auxiliary inking ribbon F that extends longitudinally in front of the platen in alinement with the original or record ribbon of the machine. The specific means for operating this auxiliary ribbon is made the subject of a patent granted to me November 5th, 1907, No. 870,336, and it is therefore unnecessary to describe the same in detail herein. Suffice it to say, however, that the ribbon is wound upon spools *f*, *f'*, mounted on suitable brackets G that are secured to any convenient part of the carriage. Spindles *h* on which the spools are journaled are provided with ratchet disks H and levers I loosely fulcrumed on said spindles that carry a suitable pawl *m* to engage with said ratchet. Levers I are kept normally at right angles to the line of movement of the carriage by a leaf spring *i* and have their longer extended portions engaged by arms J and K attached to the frame of the machine in the manner shown. When one of the levers I engages its respective arm J or K said lever will move a slight distance and likewise cause its spool to wind up a portion of the ribbon by reason of the engagement of the pawl *m* with the ratchet. Arms J and K are provided with slots *j* and *k* respectively and thumb-screws L and N for the purpose of adjusting the same to regulate the movement of levers I. If desired, one of these arms may be moved out of the path of the lever I when the other is in use, and vice versa.

The track, the truck, and the paper supporting framework can be easily attached to and removed from most any machine now on the market having a reciprocating platen carrier, and either to old or new machines. To do this might require a slight modification of the construction of the hooks 16 or equivalent mechanism, but all such changes I desire to be considered as contemplating within the scope of my invention, substantially as hereinbefore described.

What I claim as new is:—

1. A typewriting machine comprising a suitable supporting-frame, a reciprocal carriage, a platen journaled therein, a shield therefor, a cutter-blade pivotally connected to the ends of said shield and normally pressing down upon the same and common means for retaining said cutter-blade either at the lower or upper limit of its movement.

2. A typewriting machine comprising a suitable supporting-frame, a reciprocal carriage, a platen journaled therein, a shield therefor, a cutter-blade pivotally connected to the ends of said shield and normally pressing down upon the same, and a spring for retaining said cutter-blade at the lower or upper limit of its movement.

3. In a typewriting machine a suitable supporting-frame, a carriage reciprocal thereon, and a platen mounted upon the same, in combination with a vertical frame for holding a web of paper, located at the rear of the machine and supported independently of said carriage, and hooks connected to said vertical frame for removably attaching the same to said carriage.

4. In a typewriting machine a suitable supporting-frame, a carriage reciprocal thereon, and a platen mounted upon the same, in combination with a vertical frame for holding a web of paper, located at the rear of the machine and supported independently of said carriage, hooks connected to said vertical frame for removably attaching the same to said carriage, and a track removably connected to said supporting-frame upon which said vertical frame moves.

5. In a typewriting machine a suitable supporting-frame, a carriage reciprocal

thereon, and a platen mounted upon the same, in combination with a vertical frame for holding a web of paper, located at the rear of the machine and supported independently of said carriage, hooks connected to said vertical frame for removably attaching the same to said carriage, a truck supporting said vertical frame, and a track removably connected to said supporting-frame upon which said truck travels.

In testimony whereof I have hereunto set my hand this 14th day of July, A. D., 1905.

ENGLAND J. BARKER.

Witnesses:

CHARLES A. BARKER,

E. K. LUNDY.