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Patented Oct. 31, 1899.

F. C. DOLBY.

MECHANISM FOR RELEASING SPACE BARS OF LINOTYPE MACHINES.

(Application filed Feb. 18, 1899.)

(No Model.)

Fig. 1.

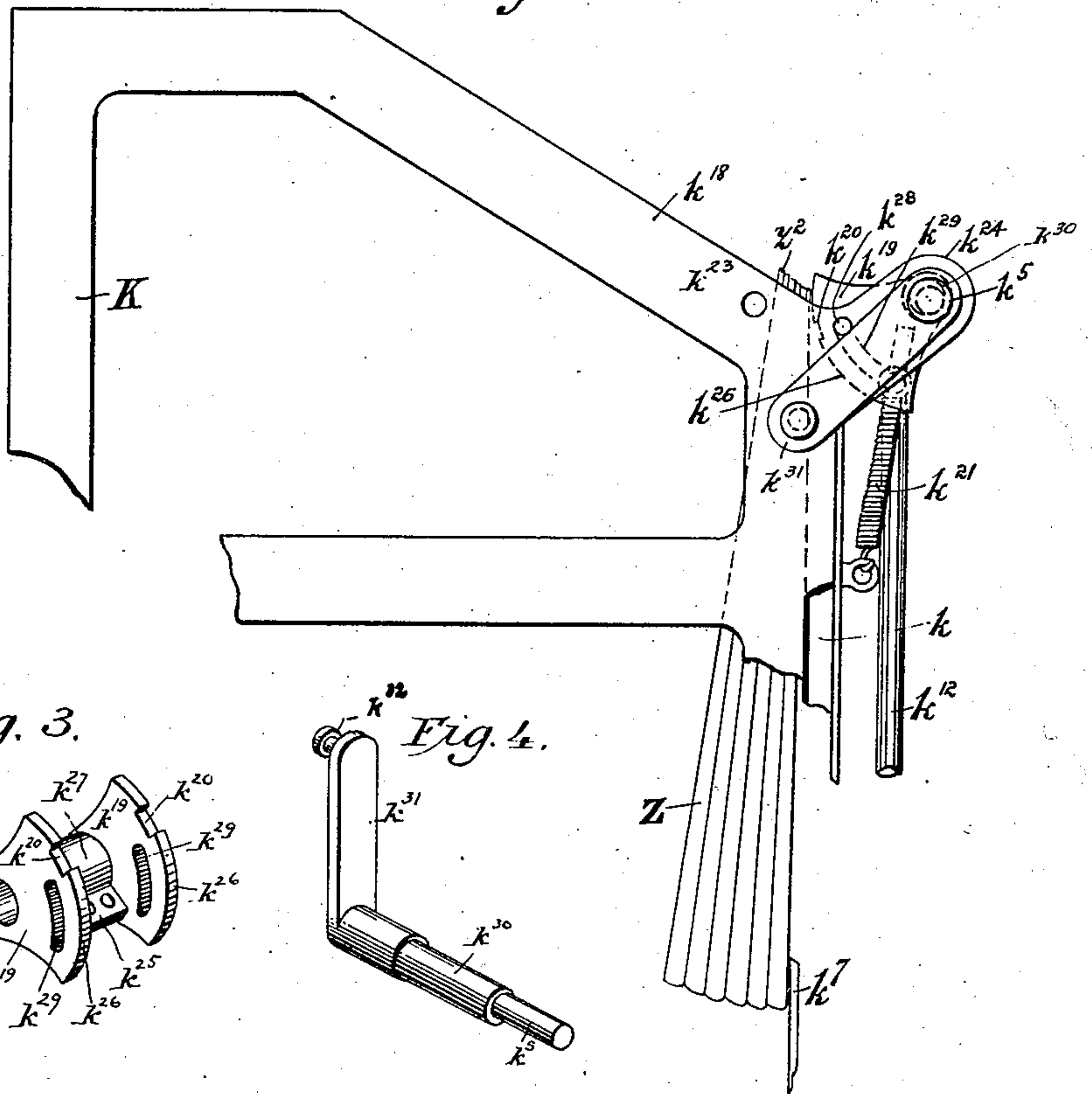


Fig. 3.

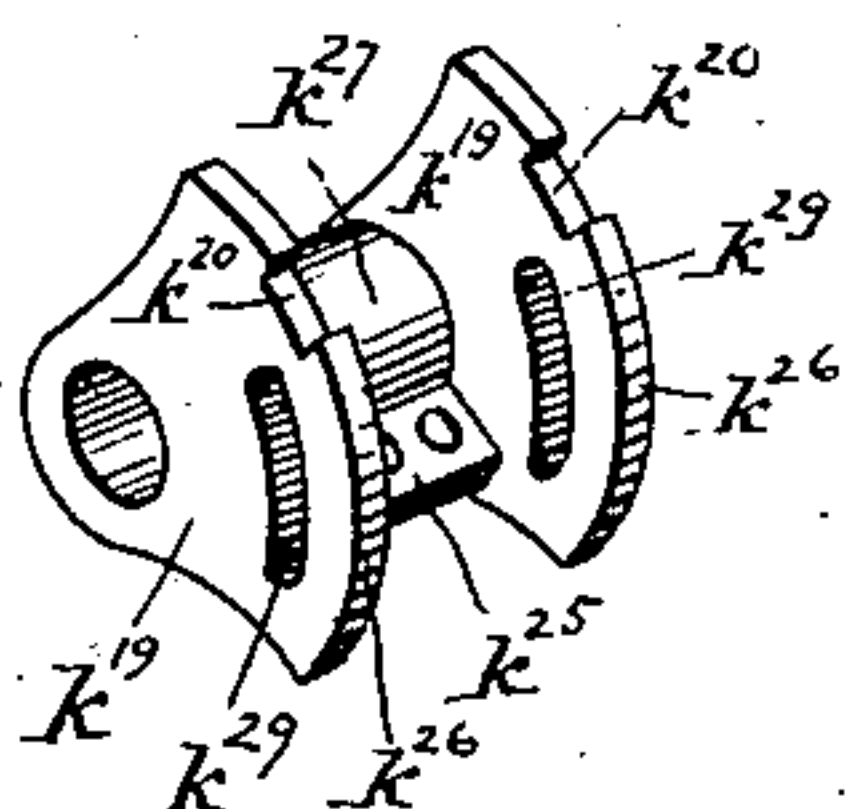


Fig. 4.

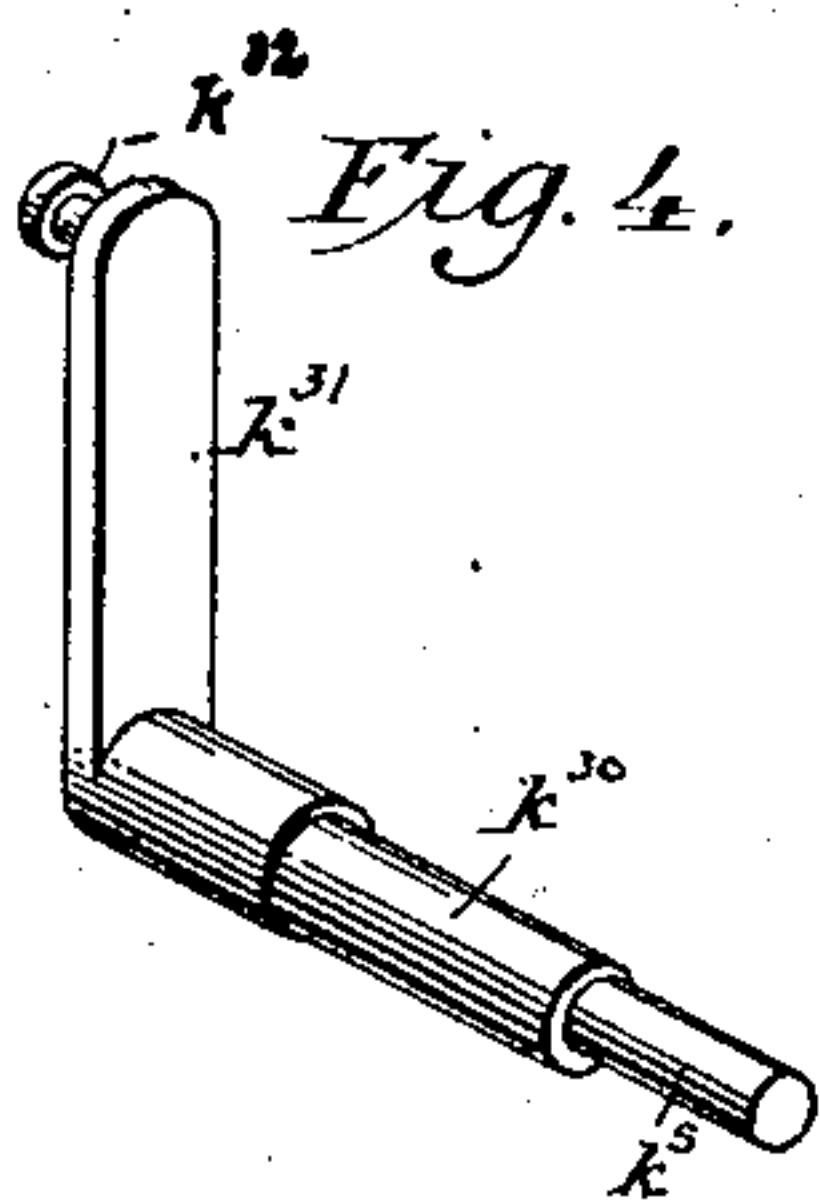
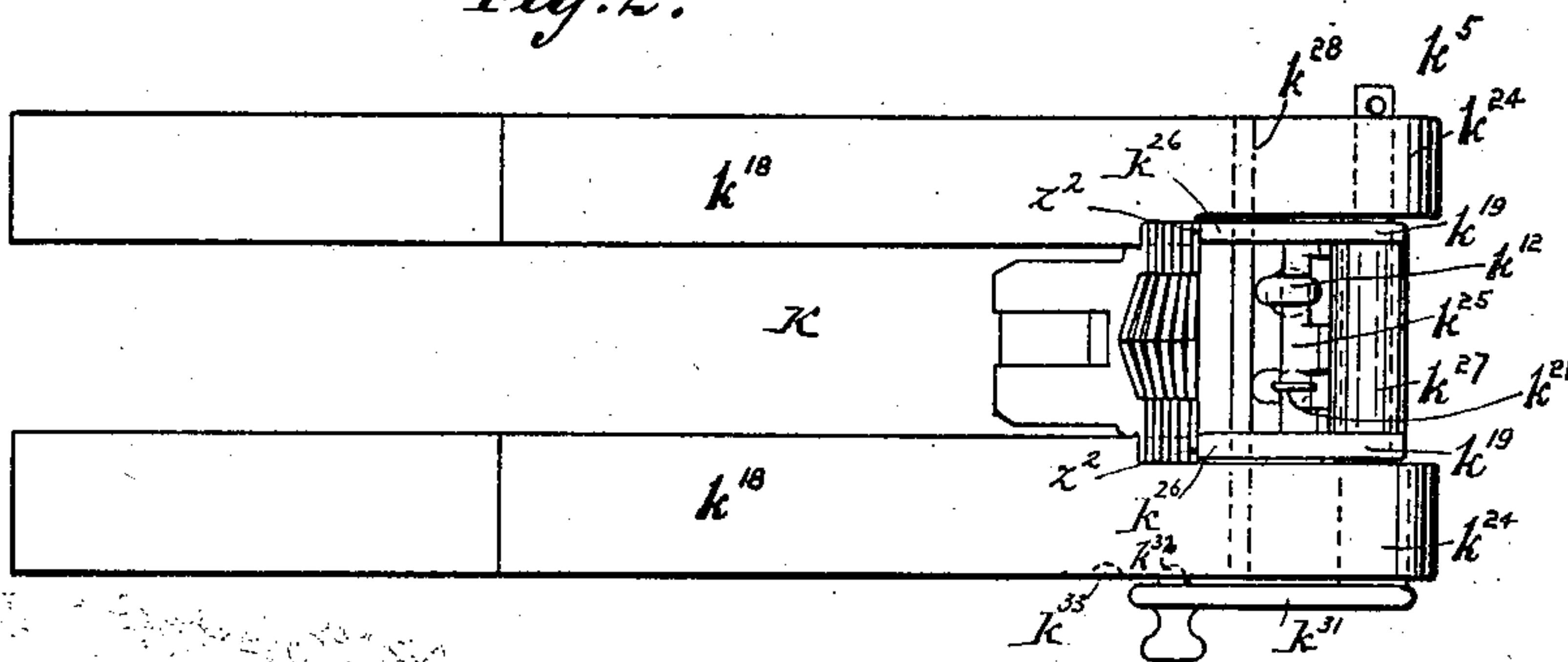


Fig. 2.



Witnesses.

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UNITED STATES PATENT OFFICE.

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MECHANISM FOR RELEASING SPACE-BARS OF LINOTYPE-MACHINES.

SPECIFICATION forming part of Letters Patent No. 635,997, dated October 31, 1899.

Application filed February 18, 1899. Serial No. 705,996. (No model.)

To all whom it may concern:

Be it known that I, FRANK CUTTRISS DOLBY, of Broadheath, in the county of Chester, England, have invented certain new and useful
5 Improvements in Mechanism for Releasing the Space-Bars of Linotype-Machines; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to
10 which it appertains to make and use the same.

The present invention relates to improvements in mechanism for taking the space-bars of the Mergenthaler linotype-machine described in the specification of Letters Patent No. 436,532, dated September 16, 1890;
15 from their magazine one by one and dropping them down the delivery-chute into the assembly-box.

Referring to the accompanying drawings,
20 Figure 1 is a front elevation of the top of the space-bar magazine to which the present invention has been applied, and Fig. 2 is a plan corresponding therewith. Fig. 3 is a perspective view of the releasing device. Fig. 4 is a
25 perspective view of the eccentric shaft on which the delivering device pivots and by which it is adjusted for bands of different thicknesses.

K is the space-bar magazine, and k the delivery-chute from it to the assembly-box.

Z are the space-bars, hanging by their shoulders z^2 from the top rails k^{18} of the magazine K, down which they slide by gravity till the shoulders z^2 of the leading one bear against
35 the releasing device, comprising the arc-shaped edges k^{20} of a pair of sectors k^{19} , held together by a bush k^{27} , turning upon a shaft k^5 , the journals of which are concentric with the said edges k^{20} and turn in bearings in lugs
40 k^{24} , projecting from the top rails k^{18} . The bottom end of the first space-bar rests against a shoulder k^7 . The edge k^{20} of each sector k^{19} has a notch k^{20} in it large enough to receive a shoulder z^2 ; the two notches being aligned with
45 each other.

k^{12} is a connecting-rod made fast by having its top end bent around the bar k^{25} , which extends from one sector k^{19} to the other, and by its opposite end to a key-lever, (not shown in
50 the figures and by which the said rod is raised

each time a space-bar Z is to be taken from the magazine K.)

k^{21} is a returning-spring pulling on the pair of sectors k^{19} from a fixed point on the magazine K.

k^{28} is a pin passed through the extensions k^{24} and an arcual slot k^{29} in each sector k^{19} to limit their motion. The sector edges k^{26} are concentric with the shaft k^5 and stand close up to the open side of the magazine K. The notches k^{20} are so positioned in those edges that so long as the rod k^{12} is not raised they stand lower than the shoulders z^2 of the leading space-bar Z. When the said rod is raised
65 by the depression of its key-lever against the pull of the spring k^{21} , the said notches k^{20} first stand opposite the said shoulders z^2 , which then slide into them and then lift the space-bar clear of the shoulder k^7 . When the rod
70 k^{12} is pulled down, the sectors k^{19} are returned into the position illustrated in the figures, as much of the edges k^{26} as then stand above the notches k^{20} holding back the remaining space-bars, while the one whose shoulders z^2 were held by the said sectors drops down the chute
75 k . It is obvious that the notches k^{20} may not be larger than suffices to receive one pair of shoulders z^2 at once and that consequently any pair of sectors notched and mounted as above described can deal only with space-bars of a
80 given size and having shoulders z^2 of a certain thickness.

One object of the present invention is to make the sectors capable of dealing with space-bars differing in the thickness of their
85 shoulders z^2 , and it consists in interposing an eccentric portion of the shaft k^5 between its journal and the bush k^{27} , by which the edges k^{20} can be moved away from the magazine K, so as to allow the thicker shoulders
90 z^2 of stronger space-bars to be engaged by the notches k^{20} . k^{30} is an enlargement of the shaft k^5 circular in transverse section and eccentric to the two ends or journals of the shaft which are concentric, but of different sizes, so that
95 the shaft may be inserted endwise to its place. The bush k^{27} fits that eccentric. k^{31} is a winch-handle fast upon the front end of the shaft k^5 . It is resilient, so that a stud k^{32} on the back of its outer end may automatically
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engage in one of a series of holes k^{23} in the front of the magazine K to hold the sector edges k^{26} at their desired distance from the open mouth of the magazine K and to prevent that distance being altered by the reciprocating motion of the bush k^{27} upon the shaft k^5 .

The eccentric enlargement k^{30} may be a sleeve turning on the shaft k^5 , projecting through the front lug k^{24} , the handle k^{31} being made fast on that end instead of upon the front end of the shaft k^5 .

I claim—

1. The combination in the mechanism for releasing and delivering the space-bars of a Mergenthaler linotype-machine, of notched sectors; a shaft upon which they turn; and an adjustable eccentric interposed between the said shaft and the sectors as and for the purpose set forth.

2. The combination in the mechanism for releasing and delivering the space-bars of a Mergenthaler linotype-machine, of notched sectors; a shaft upon which they turn; an adjustable eccentric interposed between the said shaft and the sectors; and a device for adjusting the position of the eccentric with reference to the notched edges of the sectors, as and for the purpose set forth.

3. The combination in the mechanism for releasing and delivering the space-bars of a

Mergenthaler linotype-machine, of notched sectors adapted to engage the shoulders of the leading space-bar; a shaft having journals turning in bearings concentric with the notched arcual edges of the said sectors; a circular enlargement of the said shaft eccentric to the said journals and bearings; a bush connecting the said sectors and embracing the said eccentric enlargement; a device by which the said enlargement can be turned in the said bush and a device by which the said enlargement can be held in the desired position.

4. A delivering device for the space-bars of a linotype-machine, consisting of an oscillating member, notched to receive and carry the end of one band while holding back the remainder.

5. In a linotype-machine and in combination with the space-bar magazine, having inclined surfaces k^{18} to sustain the space-bars, the oscillating delivering device, having notched sectors to receive and deliver one space-bar at a time.

In testimony that I claim the foregoing as my invention I have signed my name in presence of two subscribing witnesses.

FRANK C. DOLBY.

Witnesses:

THOMAS TAYLOR,

CHARLES WALTER PASHLEY.