

W. F. KLINCK.  
COMBINATION RECEIVING, DIVIDING, AND CONVEYING DEVICE.  
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964,166.

Patented July 12, 1910.

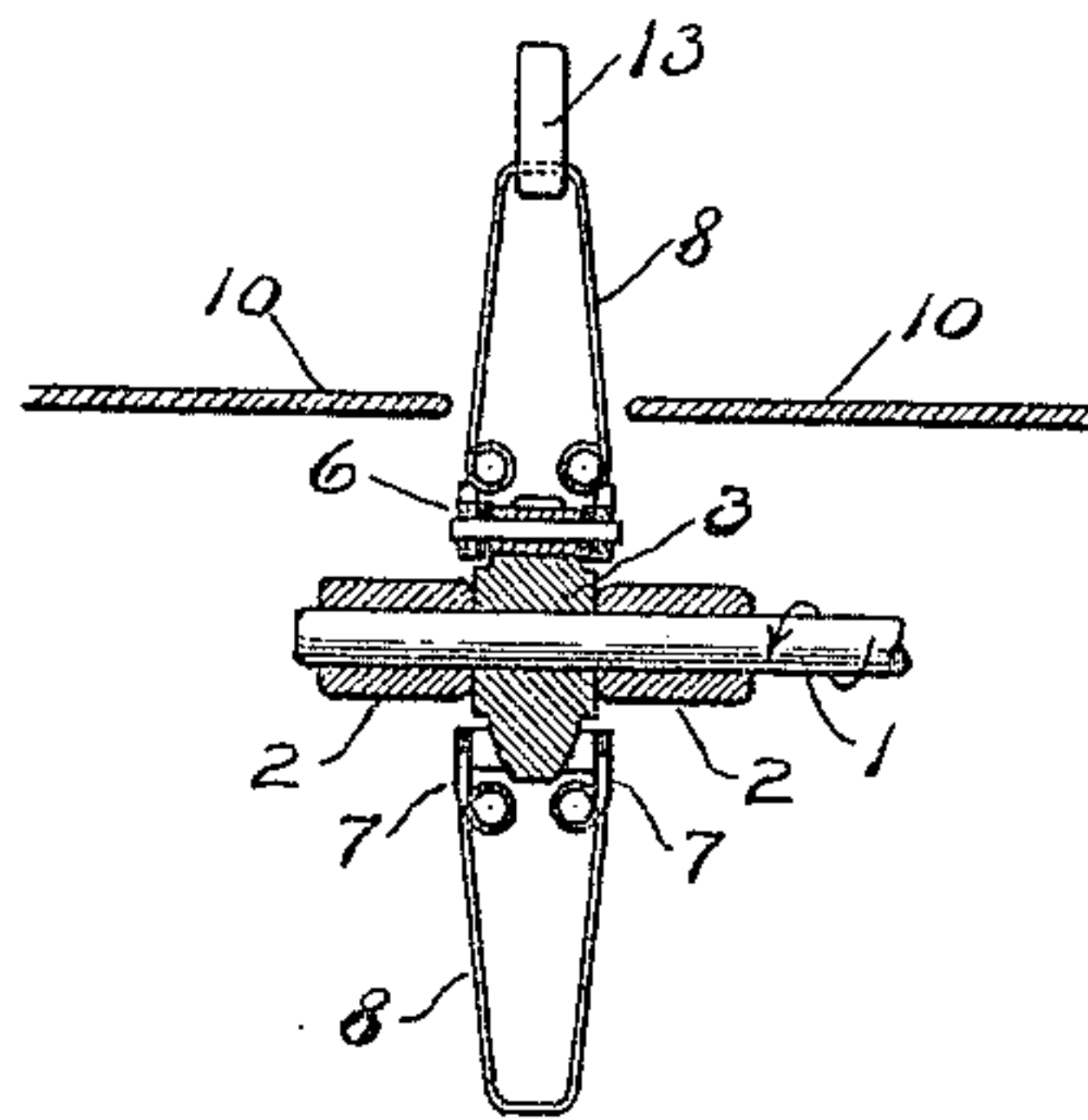
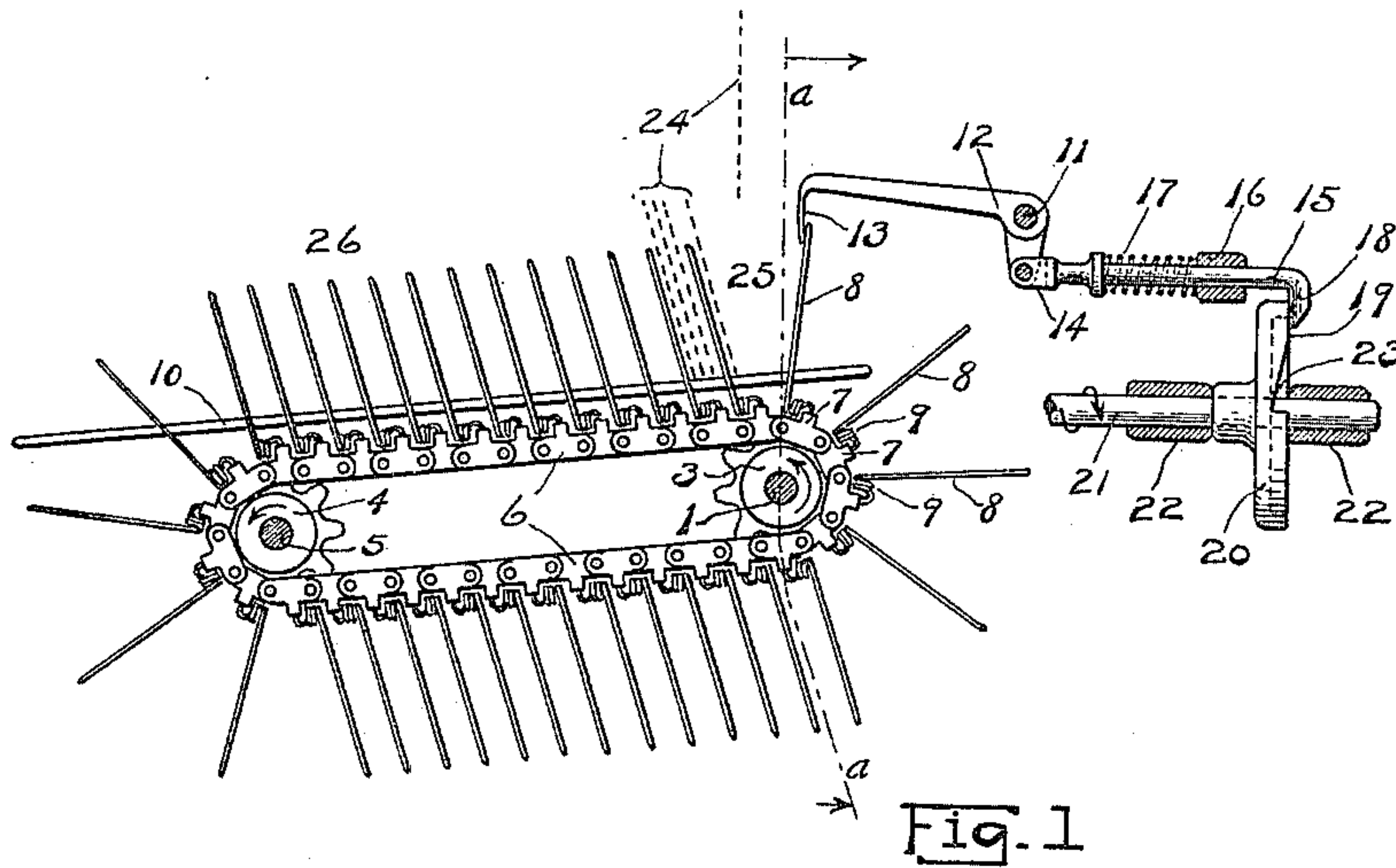


Fig. 2

WITNESSES:

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# UNITED STATES PATENT OFFICE.

WILLIAM F. KLINCK, OF AKRON, OHIO.

COMBINATION RECEIVING, DIVIDING, AND CONVEYING DEVICE.

964,166.

Specification of Letters Patent.

Patented July 12, 1910.

Application filed November 12, 1907. Serial No. 401,842.

*To all whom it may concern:*

Be it known that I, WILLIAM F. KLINCK, a citizen of the United States, residing at Akron, in the county of Summit and the State of Ohio, have invented a new and useful Combination Receiving, Dividing, and Conveying Device, of which the following is a specification.

My invention relates to improvements in combination receiving, dividing, and conveying devices, and more particularly to that type adapted to receive such products as paper sheets, envelopes, and cards, from the machine producing them, and divide them into sections containing a desired number, also convey them within convenient reach of the operator.

The device may be attached to, or become a part of a machine, and the object of my invention is to provide an improved labor saving device embodying simplicity in construction and certainty in operation. I attain these objects by the mechanism hereinafter described, and illustrated in the accompanying drawing, in which—

Figure 1 is mainly a front elevation of the device, and to simplify the illustration some unimportant features such as the supporting of certain elements are omitted. Fig. 2 is a vertical section of the device on the line *a—a* looking in the direction that is indicated by the arrows.

Similar characters of reference denote corresponding parts in the different views.

In the said drawings the reference numeral 1 denotes a shaft which is free to revolve within the fixed bearings 2 and 2 which support same.

A toothed wheel 3 forming a sprocket, is mounted upon and secured to the shaft 1. A second toothed wheel 4 forming a sprocket similar to the one 3, is mounted upon and secured to the shaft 5 which is free to revolve within fixed bearings similar to the ones 2 and 2.

Passing over and engaging with the sprockets 3 and 4, is an endless link-chain 6 of usual construction, but having lugs 7 projecting from each link into which are secured the ends of the fingers 8. Close to the secured ends of the fingers 8 are small coils 9 which afford the desired flexibility to the fingers. Supported on each side of the fingers, and above the level of the chain are two inclined planes 10 and 10.

Mounted upon and free to rotate about

the fixed shaft 11, is a bell crank 12, the long arm of which has a hooked end 13 adapted to engage the ends of the fingers 8, and the short arm of which, engages the yoke end 14 of the rod 15. A fixed guide 16 supports the rod 15, and permits it to have a longitudinal movement. A spring 17 retained in compression causes the foot end 18 of the rod 15 to bear against the face 19 of the cam 20. Mounted upon, and secured to shaft 21 which is free to revolve within the fixed bearings 22 and 22, is the cam 20 having a notch 23 in the face 19.

From the above description the operation of my improved construction will be understood to be as follows: The shafts 1 and 21 are constantly rotated in the direction indicated by the arrows and the shaft 21 is rotated at a speed equal to one revolution for each finger 8 passing a given point in their course. Products of the class previously stated are delivered to the device, at equal intervals, and in the manner illustrated by the dotted lines 24. During the period the apartment 25 is receiving the products, the finger at the right is being retained by the hook 13, and at the instant the foot 18 enters the notch 23 the spring 17 causes the rod 15 to move to the left thereby lifting the hook 13 and releasing the retained finger which instantly attains its natural position, and the following products enter the next apartment. As the notch 23 passes the foot 18, the rod 15 returns to its normal position, which causes the hook 13 to return in ample time to engage the approaching finger 8. The planes 10 and 10 afford a support for the products as they are conveyed near the point 26 where they are extracted.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. In a device of the character described, the combination of an endless belt, flexible fingers projecting therefrom, a hook adapted to engage successively the said fingers, and means for actuating the hook to release the fingers.

2. In a device of the character described, the combination of an endless belt, flexible fingers projecting therefrom, a hook adapted to engage successively the said fingers, a rod having an operative connection with the hook, and a cam coöperating with the rod for operating the hook to release the fingers.



3. In a device of the character described, the combination of an endless belt, flexible fingers projecting therefrom, a bell crank lever formed with a hooked arm adapted to  
5 engage successively the fingers, and means for operating the bell crank lever to release the fingers.

4. In a receiving, dividing, and conveying device, the combination of a movably mounted  
10 endless belt having flexible fingers secured thereto, a hook adapted to engage the ends of said fingers, and a cam to actuate said hook and thereby retain and release the end of each finger, substantially as set forth.

15 5. In a receiving, dividing, and conveying device, the combination of an endless chain adapted to pass around suitable sprockets, flexible fingers secured to the links of said  
20 chain, a hook adapted to engage the ends of said fingers, and a cam and spring adapted

to actuate said hook and thereby retain and release the end of each finger, substantially as set forth.

6. In a receiving, dividing, and conveying device, the combination of an endless chain 25 adapted to pass around suitable sprockets, a flexible finger secured to each link of said chain, a hook adapted to engage the ends of said fingers, a cam and spring adapted to actuate said hook and so retain and release 30 the end of each finger, and a fixed plane for supporting the products, all substantially as set forth.

In testimony whereof I affix my signature in the presence of two subscribing witnesses. 35

WILLIAM F. KLINCK.

Witnesses:

C. F. ADAMSON,

C. L. HARMON.