F. D. CLEVELAND.

ROTARY CARRIER.

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1,125,657.

Patented Jan. 19, 1915.

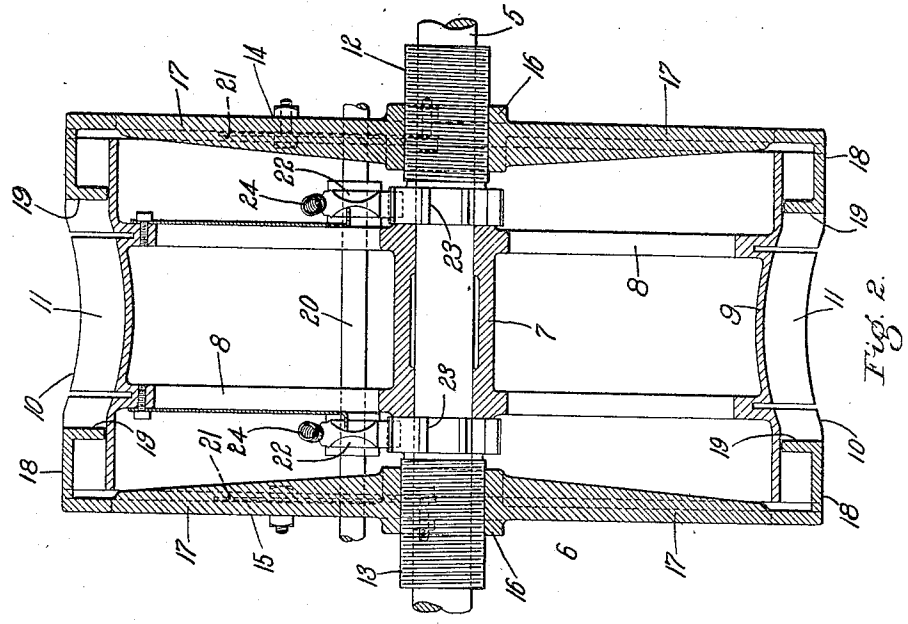


Fig. 2.

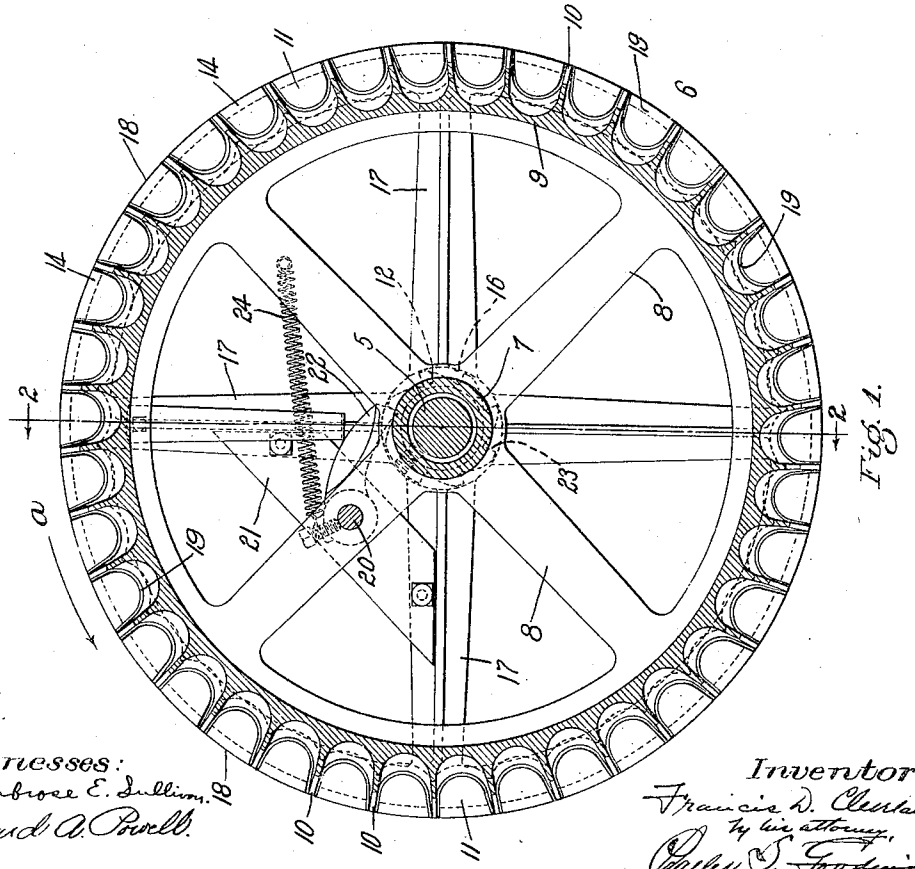


Fig. 1.

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by his attorney.
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THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

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ROTARY CARRIER.

1,125,657. Specification of Letters Patent. Patented Jan. 19, 1915.

Application filed March 20, 1914. Serial No. 826,112.

To all whom it may concern:

Be it known that I, FRANCIS D. CLEVELAND, a citizen of the United States, residing at Winchester, in the county of Middlesex and State of Massachusetts, have invented new and useful Improvements in Rotary Carriers, of which the following is a specification.

This invention relates to a rotary carrier for articles and is particularly adapted to conveying or carrying fish for the purpose of having the heads and tails cut therefrom.

In carriers of the class set forth in my Patent No. 1,030,646, dated June 25, 1912, gages are employed with which the heads of the fish are brought into contact prior to the cutting operation and it is desirable that these gages should be simultaneously adjustable toward and away from each other in order that different sized articles, such as fish, may be accommodated in the same carrier, that is, so that the same carrier shall be capable of having the gages adjusted relatively thereto with accuracy and facility in order that said carrier may be adapted to receive and have positioned therein relatively to the gages, fish of different sizes.

The invention consists in a rotary carrier such as hereinafter described in the specification and particularly as pointed out in the claims.

Referring to the drawings: Figure 1 is a sectional elevation of the carrier as viewed from the side thereof. Fig. 2 is a sectional elevation taken on line 2—2 of Fig. 1.

Like numerals refer to like parts throughout the several views of the drawings.

In the drawings, 5 is a driving shaft, 6 is a carrier rotatably mounted on said shaft and consisting of a hub 7, arms 8 and a rim 9 having partitions 10 extending longitudinally of the shaft 5, and forming pockets 11 adapted to contain articles, such as fish. The carrier 6, it will be understood, is mounted to rotate freely upon the shaft 5. On opposite sides of the hub 7 are located two sleeves 12 and 13. The sleeve 12 is provided with a left handed screw-thread upon its periphery and the sleeve 13 is provided with a right handed screw-thread upon its periphery. Upon opposite sides of the carrier 6 are located two gages 14 and 15 which have screw-threaded engagement, respectively, with the sleeves 12 and 13. These gages each consist of a hub 16, arms 17 and a rim 18. The rims 18 have ears 19 thereon which project into the pockets 11.

A rod 20 extends through the arms 8 on the carrier 6 and is fast thereto. The opposite ends of said rod project through brackets 21 fast to the arms 17 of the gages 14 and 15 and said rod has sliding engagement with said brackets and, therefore, with the gages 14 and 15. Thus the gages 14 and 15 are free to slide toward and away from the carrier 6 and are kept in alinement therewith by the rod 20. Pawls 22 are pivoted upon the rod 20 and engage ratchet teeth 23 on the sleeves 12 and 13. Springs 24 normally hold the pawls 22 in engagement with the ratchet teeth 23. Thus it will be seen that the gages are locked against rotation relatively to the carrier, while they are free to be moved toward and away from said carrier.

The operation of the carrier hereinbefore specifically described is as follows: When the carrier is being operated to carry the articles around on its periphery it is rotated by means of the shaft 5 turning in the direction of the arrow *a* (Fig. 1). When it is desired to move the gages 14 and 15 toward or away from each other the pawls 22 are thrown out of engagement with the ratchet teeth 23 and while the shaft 5 is held stationary the carrier and the gages are rotated therearound. As the sleeves 12 and 13 are fastened to the shaft it will be evident that said shaft and sleeves constitute in effect a single piece of a rotary member with right and left hand screw-threads upon its periphery and that said rotary member will remain stationary while the gages rotate about their screw-threaded peripheries, and while the carrier rotates about the shaft in the same direction. Thus the gages will be moved toward and away from the carrier according to the direction in which said gages are rotated on the screw-threaded peripheries of the sleeves 12 and 13. It is evident that if desired the sleeves 12 instead of being made of separate material from the shaft 5 and fastened thereto may be made integral therewith. In other words the right and left screw-threads may be formed directly upon the shaft itself instead of upon sleeves rigidly fastened thereto and constituting a portion thereof.

I claim:

1. A device of the character described having, in combination, a rotary carrier for articles, gages located on opposite sides, respectively, of said carrier and rotatable therewith and means adapted to simultaneously move said gages toward or away from each other.

2. A device of the character described having, in combination, a rotary carrier for articles, a rotary member upon which said carrier is rotatably mounted, gages located on opposite sides, respectively, of said carrier and rotatable therewith, said rotary member having right and left screw-threaded engagement, respectively, with said gages whereby said gages may be moved simultaneously toward or away from each other.

3. A device of the character described having, in combination, a rotary carrier for articles, a rotary member upon which said carrier is rotatably mounted, said carrier having pockets in its periphery extending longitudinally of said shaft and adapted to hold said articles, and gages located on opposite sides, respectively, of said carrier and projecting into said pockets, said rotary member having right and left screw-threaded engagement, respectively, with said gages whereby said gages may be moved simultaneously toward or away from each other.

4. A device of the character described having, in combination, a rotary carrier for articles, a rotary member upon which said carrier is rotatably mounted, gages located on opposite sides, respectively, of said carrier and rotatable therewith, said rotary member having right and left screw-threaded engagement, respectively, with said gages whereby said gages may be moved simultaneously toward or away from each other, and means adapted to lock said carrier and gages against rotation on said shaft.

5. A device of the character described having, in combination, a rotary carrier for articles, a shaft upon which said carrier is rotatably mounted, sleeves fast to said shaft and constituting a portion thereof on opposite sides of said carrier with right and left screw-threads, respectively, on their peripheries and gages on opposite sides, respectively, of said carrier and having screw-threaded engagement with said sleeves, whereby said gages may be simultaneously moved toward or away from each other.

6. A device of the character described having, in combination, a rotary carrier for articles, a shaft upon which said carrier is rotatably mounted, sleeves fast to said shaft and constituting a portion thereof on opposite sides of said carrier with right and left screw-threads, respectively, on their peripheries and gages on opposite sides, respectively, of said carrier and having screw-threaded engagement with said sleeves, means to lock said carrier to said shaft and means to lock said gages against rotation relatively to said carrier while leaving said gages free to be moved toward or away from said carrier.

7. A device of the character described having, in combination, a rotary carrier for articles, a shaft upon which said carrier is rotatably mounted, sleeves fast to said shaft and constituting a portion thereof on opposite sides of said carrier with right and left screw-threads, respectively, on their peripheries and gages on opposite sides, respectively, of said carrier and having screw-threaded engagement with said sleeves, ratchet teeth on one of said sleeves and a pawl pivotally mounted on said carrier and adapted to be moved out of and into engagement with said ratchet, whereby said gages may be simultaneously moved toward and away from each other or locked against movement relatively thereto.

8. A device of the character described having, in combination, a rotary carrier for articles, a shaft upon which said carrier is rotatably mounted, sleeves fast to said shaft and constituting a portion thereof on opposite sides of said carrier with right and left screw-threads, respectively, on their peripheries and gages on opposite sides, respectively, of said carrier and having screw-threaded engagement with said sleeves, a rod fast to said carrier extending longitudinally of said shaft and having sliding engagement with said gages, ratchet teeth on one of said sleeves and a pawl pivoted on said rod and arranged to engage said ratchet teeth, whereby said gages may be simultaneously moved toward and away from each other or locked against movement relatively to each other.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

FRANCIS D. CLEVELAND.

Witnesses:
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Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."