

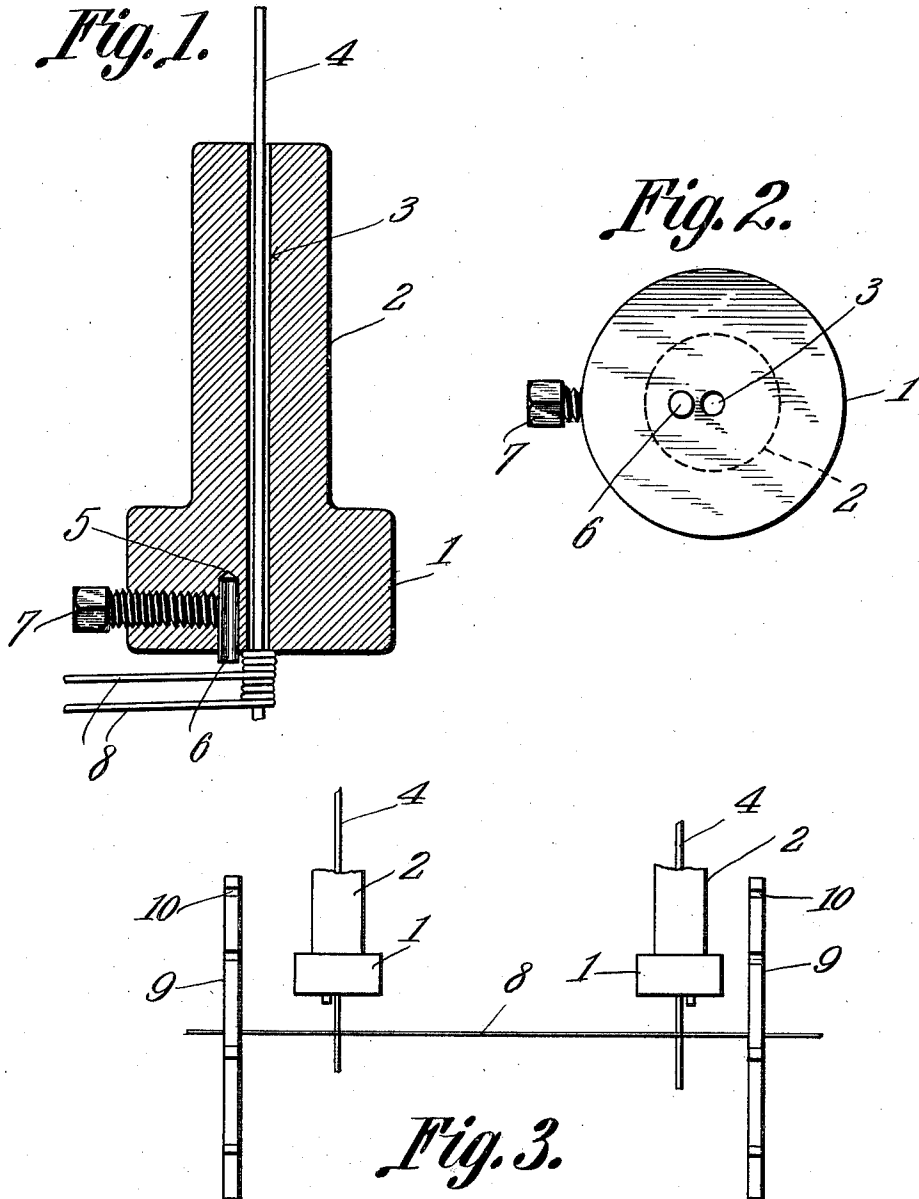
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TWISTER HEAD FOR WIRE BASKET MAKING MACHINES.

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1,038,629.

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UNITED STATES PATENT OFFICE.

VERNON D. MUNGER, OF ANTWERP, OHIO, ASSIGNOR TO THE MUNGER WIRE BASKET COMPANY, OF MASSILLON, OHIO, A CORPORATION OF OHIO.

TWISTER-HEAD FOR WIRE-BASKET-MAKING MACHINES.

1,038,629.

Specification of Letters Patent.

Patented Sept. 17, 1912.

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To all whom it may concern:

Be it known that I, VERNON D. MUNGER, a citizen of the United States, residing at Antwerp, in the county of Paulding and State of Ohio, have invented a new and useful Twister-Head for Wire-Basket-Making Machines, of which the following is a specification.

This invention has reference to improvements in twister heads for wire basket making machines and its object is to provide a twister head adapted to form the ends of wire strands into helices about a strand designed to form the top or bottom of the finished basket, the strands twisted about the top and bottom strands constituting the up and down strands of the finished basket.

A machine designed for the manufacture of wire baskets comprises means for feeding two strands in parallel spaced relation through twister heads constructed in accordance with the present invention and other strands of predetermined length are placed transversely to the main strands and are then engaged by the twister heads and their ends are twisted about the other strands forming a fabric from which the baskets are ultimately formed.

The invention will be best understood from a consideration of the following description taken in connection with the accompanying drawings forming a part of this specification, in which drawings:—

Figure 1 is a longitudinal central section through a twister head constructed in accordance with the present invention. Fig. 2 is an end view of the same from the twisting face thereof. Fig. 3 is a more or less diagrammatic representation of the arrangement of the twister heads and the means for feeding the strands thereto.

Each twister head comprises a cylindrical block 1 with an axial shank 2 projecting from one side thereof, and extending axially through the head and shank is a passage 3 for a strand 4 constituting one of the circumferential strands of the finished basket, being either the upper strand thereof or the lower strand thereof, intermediate strands when needed being otherwise placed.

In eccentric relation to the central passage 3 is a socket 5 opening through the active face of the head 1 and designed to receive a pin 6 while a set screw 7 inserted in a suitably threaded passage leading to the socket

5 serves to maintain the pin 6 in removable relation to the head 1 with the desired projection beyond the active face thereof.

As shown in Fig. 3 the twister heads 1 are spaced apart the distance between the top and bottom strands of the finished basket so that there is formed a fabric made up of the longitudinal strands 4 and other cross strands 8 which latter in the fabric are spaced apart the desired distance to constitute the longitudinal strands of the finished basket, the strands 4 then forming the top and bottom members and may be made of a larger gage than the other strands thereby imparting the requisite stiffness and strength to the basket.

The strands 8 are fed one at a time into operative relation to the strands 4 by disks 9 which may be spaced apart to a greater distance than the separation of the strands 4 and these disks are provided with peripheral notches 10 adapted to hold the strands 8 which are placed in the notches by an operator, although this does not preclude the placing of the strands 8 in the notches 10 by suitable mechanism.

Rotative movement is given to the disks 9 in a step-by-step manner by any suitable mechanism which need not be herein disclosed and rotative movement in opposite directions is given to the heads 1 also by suitable mechanism which need not be herein disclosed, the said heads 1 being also given a longitudinal movement for a purpose which will presently appear.

The strands 8 are moved by the disks 9 one at a time into engagement with the strands 4 and then the heads 1 may be moved longitudinally until the pins 6 are in engagement with the strands 8 when a rotative movement is imparted to the heads 1 preferably in opposite directions and the strands 8 are moved away from the disks 9 and wound about the strands 4, the heads 1 retreating in proper timed relation to their rotative movement so that the ends of the strands 8 are wound upon the two strands 4 in the form of a helix, the number of turns of the ends of the strands 8 about the strands 4 being determined by the setting of the mechanism. It is usually preferable that one end of the strand 8 be completely wound on the respective strand 4 while the other end of the strand 8 be given a less number of turns about the corresponding strand 4.

This is due to the fact that it is desirable that the bottom of the basket be of less circumference than the top of the basket so that the basket will have an upward flare and therefore there is needed a less number of turns of the strand 8 about the bottom circumferential member 4 than about the top circumferential member 4. Furthermore the end of the strand 8 wound about the lower circumferential member 4 may extend beyond the same and ultimately be formed into the bottom of the basket.

The pin 6 is held against movement by a set-screw 7, being adjusted by means of said screw in order that said pin may accommodate itself to strands which vary in thickness. Attention is called to the fact that this set-screw is of a diameter equal to approximately one-half the length of the pin, the same thus having a bearing surface sufficient to allow the operator to release the pin and adjust the same, there being no possibility of the pin leaving the head, the set-screw 7 being formed with a head by means of which the same may be conveniently manipulated. By this construction it will be noted that the operator need not handle the pin in adjusting the same, the adjustment being made without contact with the active face of the twister head. This construction is provided as it has been found difficult to

adjust the pin owing to the fact that the strands and the adjacent mechanism of the machine prevents the operator from conveniently handling the pin, the head of the set-screw however being so positioned that the same is readily accessible.

The extent of projection of the pins 6 from the heads 1 will depend upon the gage of the strands 8 and since these pins are held simply by the screws 7 they may be readily replaced when worn or broken.

What is claimed is:—

A twister head for wire basket machines, comprising a cylindrical portion with an active face, a shank extending from the opposite face, said head having a central longitudinal passage therethrough, and a pin socket adjacent and in eccentric relation thereto, a pin mounted to move freely in said socket, and a set-screw adapted to hold said pin against movement, said set-screw being of a diameter equal to approximately one-half the length of the pin.

In testimony that I claim the foregoing as my own, I have hereto affixed my signature in the presence of two witnesses.

VERNON D. MUNGER.

Witnesses:

J. E. DERCK,
G. W. HURLESS.

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