G. TROUP.

CLOTHES LINE REEL.

APPLICATION FILED APR. 15, 1915.

1,208,052.

Patented Dec. 12, 1916.

Fig. 2.

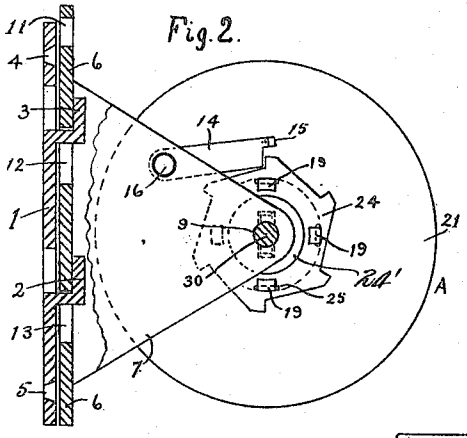


Fig. 1.

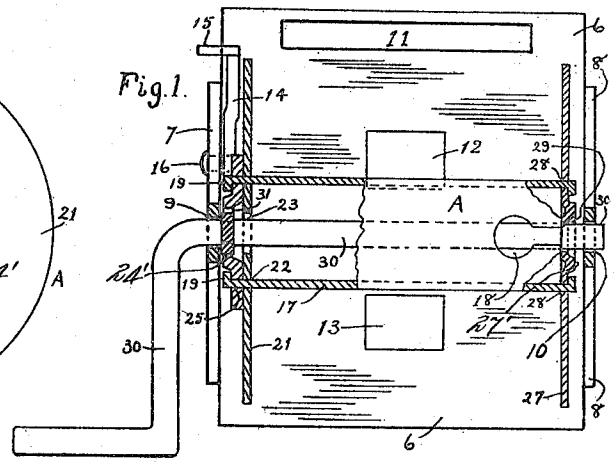
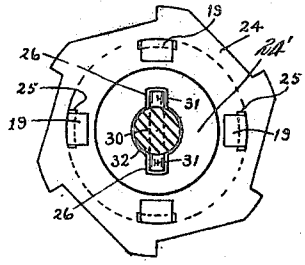


Fig. 3.



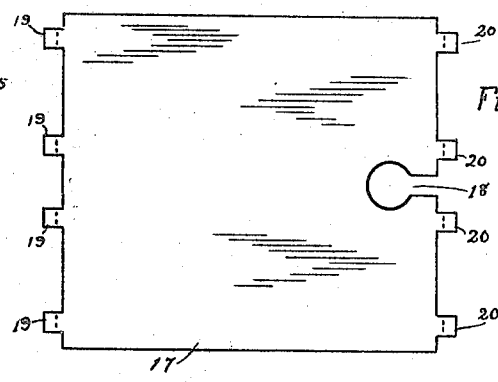


Fig. 4.

Fig. 6.

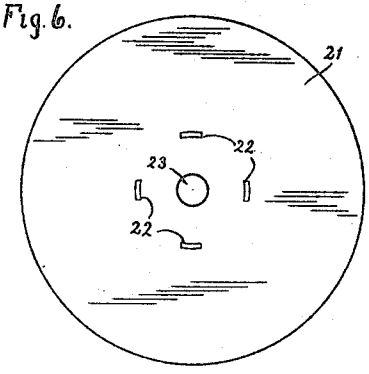
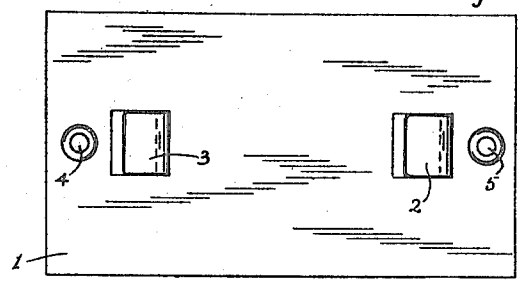


Fig. 5.



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UNITED STATES PATENT OFFICE.

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CLOTHES-LINE REEL.

1,208,052. Specification of Letters Patent. Patented Dec. 12, 1916.

Application filed April 15, 1915. Serial No. 21,562.

To all whom it may concern:

Be it known that I, GUY TROUP, a citizen of the United States, and resident of the city of Elkhart, county of Elkhart, and State of Indiana, have invented new and useful Improvements in Clothes-Line Reels, of which the following is a specification.

My invention relates to improvements in clothes-line reels, and the objects thereof are as follows, viz: first, the production of a light, cheap and durable clothes line reel, and, second, the production of a clothes line reel all parts of which are made of stamped metal and in which improved supporting means and improved reel spool construction are provided.

On the drawings, Figure 1 is a front elevation with the reel spool partly in section; Fig. 2 is a side elevation with the bracket back and support in section; Fig. 3 is an enlarged view showing an elevation of the ratchet and accompanying parts; Fig. 4 is a plan view of a sheet of metal with the disk clips and rope slot formed therein from which the reel hub is made; Fig. 5 is a plan view of the bracket support; and Fig. 6 is an elevation of a reel disk.

Similar numerals refer to similar parts, members and parts of members throughout the several views on the drawings.

The numeral 1 designates a bracket support of stamped metal, provided with supporting lugs 2 and 3 stamped from the body thereof, and provided also with screw holes 4 and 5 adapted to receive screws for fastening the bracket support 1 to a post or standard.

The numeral 6 designates a reel supporting bracket provided with integral bracket arms 7 and 8 projecting forward at right angles thereto, and provided also with reel shaft bearings 9 and 10 bored in arms 7 and 8, respectively.

The numeral 11 indicates a hand hole stamped in the upper portion of the bracket 6, and numerals 12 and 13 indicate lug openings through which the supporting lugs 2 and 3 are adapted to be projected.

The numeral 14 indicates a ratchet dog provided with a lateral arm 15 and pivotally secured to the bracket arm 7 by the pin 16. The reel spool A is composed of a hub member 17, the reel disks 21 and 27 and the ratchet 24, each of which is formed of a separate piece of stamped metal and adapted to be rigidly assembled as hereinafter described.

The spool hub 17 is formed of a single piece of malleable metal, the form of which is shown at Fig. 4, which is provided with disk clips 19, 19 and 20, 20, at opposite ends thereof, and in which is stamped the rope slot, or socket, 18 at one end thereof adapted to detachably retain the knotted end of a clothes line. The rope slot 18 is formed with an enlarged portion for the knot introduction and a reduced portion in communication therewith into which the rope is laterally projected to confine the knot underneath, the reduced portion being smaller than the knot on the rope. The hub plate shown in Fig. 4 is adapted to be tubularly rolled to form the hub 17, having the disk clips 19, 19 and 20, 20 projecting therefrom at each end thereof when so rolled.

The numerals 22 designate a plurality of clip holes formed in the disk 21 intermediate its center and its outer periphery, adapted to be penetrated by the disk clips 19 and adapted also to register with the clip holes 25 formed in the ratchet 24, which latter clip holes are also penetrated by said clips 19 and which project slightly beyond the outer face of the ratchet 24 to be bent centrally forward upon the outer face of said ratchet 24 for rigidly securing disk 21, ratchet 24 and one end of hub 17 together. The disk 27 is provided with a plurality of clip holes 28 formed therein intermediate its center and outer periphery, which are penetrated by the disk clips 20, which project slightly beyond the outer face thereof, to be bent centrally forward upon the outer face of disk 27 for rigidly securing same to the hub member 17.

The numeral 30 designates a reel shaft and handle for rotating same, the shaft portion of which is rotatively arranged within the shaft-bearings 9 and 10 of the arms 7 and 8, respectively, and which also penetrates the disk bores 23 and 29 of the disks 21 and 27, respectively. Adjacent the handle 30 the reel shaft is provided with the driving pin 31 adapted to project laterally therefrom on each side thereof into the driving pin slots 26 formed in the ratchet 24 adjacent its center and communicating with the ratchet bore 32 from opposite sides thereof. The pin 31 is rigidly secured in the reel shaft 30 and detachably arranged within the pin slots 26 for ready assembling and dismantling of the shaft and reel spool A. Being made of stamped springy metal the arms 7 and 8 may be outwardly sprung to admit shaft

assembly within the bearings 9 and 10 after the reel A has been mounted thereon.

To prevent clips 19 and 20 from catching on the arms 7 and 8, respectively, the ratchet 24 is embossed at 24′ and the disk 27 at 27′ adjacent the shaft bores of each member, which embossments project outwardly at least flush with said clips, and preferably slightly beyond same. The embossments 24′ and 27′, of said members, are stamped, or struck up, from the central portion of each of said members, and around the bores thereof, both of said members being formed of malleable or ductile metal to permit punch press construction thereof. The driving pin slots 26 are formed in the embossment 24′ of said ratchet.

I claim—

1. In a clothes line reel, the combination with a reel body provided with driving shaft bores and a ratchet rigidly secured thereto, said ratchet being provided with a driving shaft bore and driving pin slots adjacent thereto, of a driving shaft detachably arranged within said reel and ratchet bores, said shaft being provided with a driving pin aperture; and a driving pin rigidly secured within said pin aperture, projecting therefrom and having its ends arranged within said driving pin slots in said ratchet.

2. In a clothes line reel, the combination with a reel body provided with driving shaft bores and a ratchet rigidly secured thereto, said ratchet being provided with a driving shaft bore, an embossment surrounding said bore and driving pin slots formed in said embossment adjacent said bore, of a driving shaft detachably arranged within said reel and ratchet bores, said shaft being provided with a driving pin aperture; and a driving pin rigidly secured within said pin aperture, projecting therefrom and having its ends detachably arranged within said driving pin slots in said ratchet embossment.

3. In a clothes line reel, the combination with a reel support and a reel hub and shaft rotatively mounted upon the support, of a reel disk provided with clip holes; a ratchet provided with clip holes in registration with said disk clip holes; and means for rigidly securing the disk and ratchet together and to the reel hub, said means comprising integral L shaped hub clips, a portion of each of said clips being arranged within a disk and ratchet clip hole and the other portion thereof extending laterally therefrom along and upon the outer face of the ratchet.

4. In a clothes line reel, the combination with a reel support and a reel hub and shaft rotatively mounted upon the support, of a reel disk provided with clip holes of uniform shape; a ratchet provided with clip holes of uniform shape in registration with said disk clip holes; and means for rigidly securing the disk and ratchet together and to one end of the reel hub, said means comprising integral hub clips penetrating the disk and ratchet clip holes, projecting beyond the outer face of the ratchet and bent down upon and along the outer face thereof.

5. In a clothes line reel, the combination with a reel support and a reel hub and shaft rotatively mounted upon the support, of a reel disk provided with clip holes; a ratchet provided with clip holes in registration with said disk clip holes; and means for rigidly securing the disk and ratchet together and to one end of the reel hub, said means comprising integral hub clips penetrating the disk and ratchet holes, projecting beyond the outer face of the ratchet, and bent down upon and along the outer face thereof.

6. In a clothes line reel, the combination with a reel support and a reel hub and shaft rotatively mounted upon the support, of a reel disk provided with clip holes; a ratchet provided with clip holes in registration with said disk clip holes; and means for rigidly securing the disk and ratchet together and to one end of the reel hub, said means comprising integral hub clips projecting from the hub end, penetrating the disk and ratchet clip holes and clenched along and upon the outer face of the ratchet.

7. In a clothes line reel, the combination with a reel support and a reel hub and shaft rotatively mounted upon the support, of a reel disk provided with clip holes; a ratchet provided with clip holes in registration with said disk clip holes; means for securing the disk and ratchet together and to one end of the reel hub, said means comprising integral hub clips projecting from the hub end, penetrating the disk and ratchet clip holes and clenched along and upon the outer face of the ratchet; and a rope knot socket formed in the reel hub and adapted to permit of knot insertion and lateral projection thereof to secure the knot against dislodgment.

8. In a clothes line reel, the combination with a reel body provided with driving shaft bores and a ratchet at one end thereof and rotative therewith, said ratchet being centrally bored and provided with driving pin slots adjacent said bore, of a driving shaft detachably arranged within said reel and ratchet bores, said shaft being provided with lateral projections which are detachably arranged within said driving pin slots in said ratchet.

In witness whereof I have hereunto affixed my signature this 12th day of April, A. D. 1915.

GUY TROUP.

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