April 6, 1937. J. MORES 2,076,476

AERIAL MAIL CATCHER

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Fig. 1.

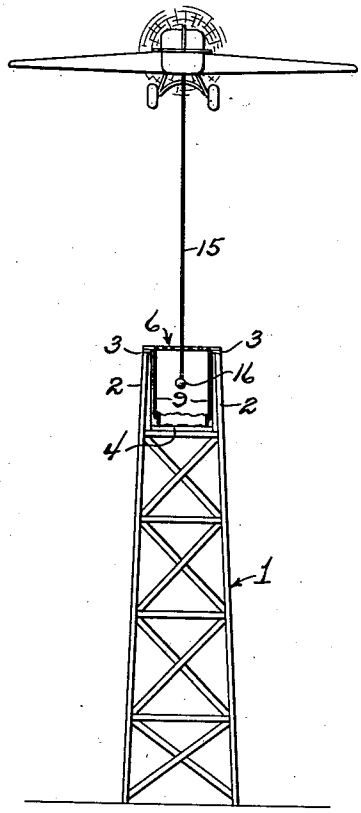


Fig. 2.

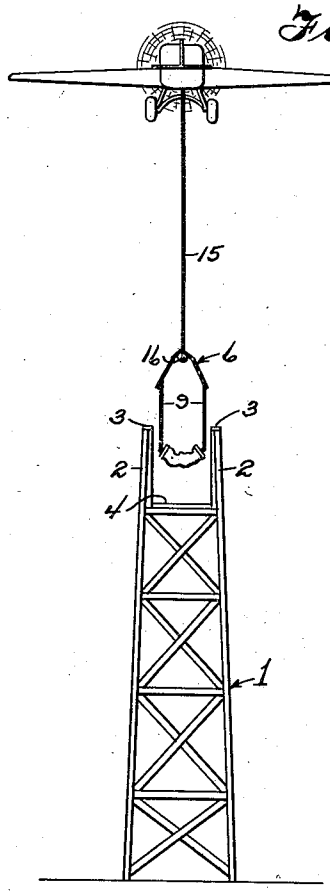


Fig. 5.

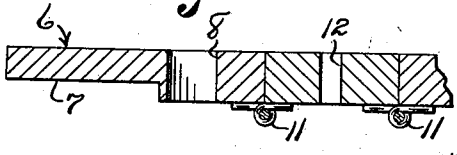


Fig. 6.

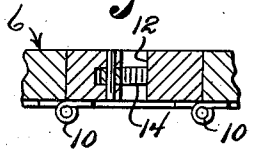
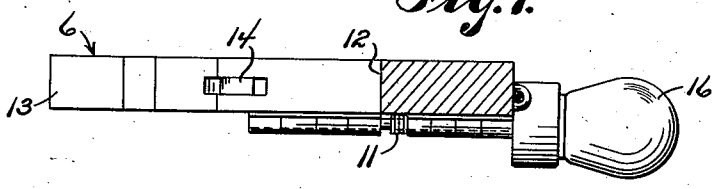


Fig. 7.



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AERIAL MAIL CATCHER

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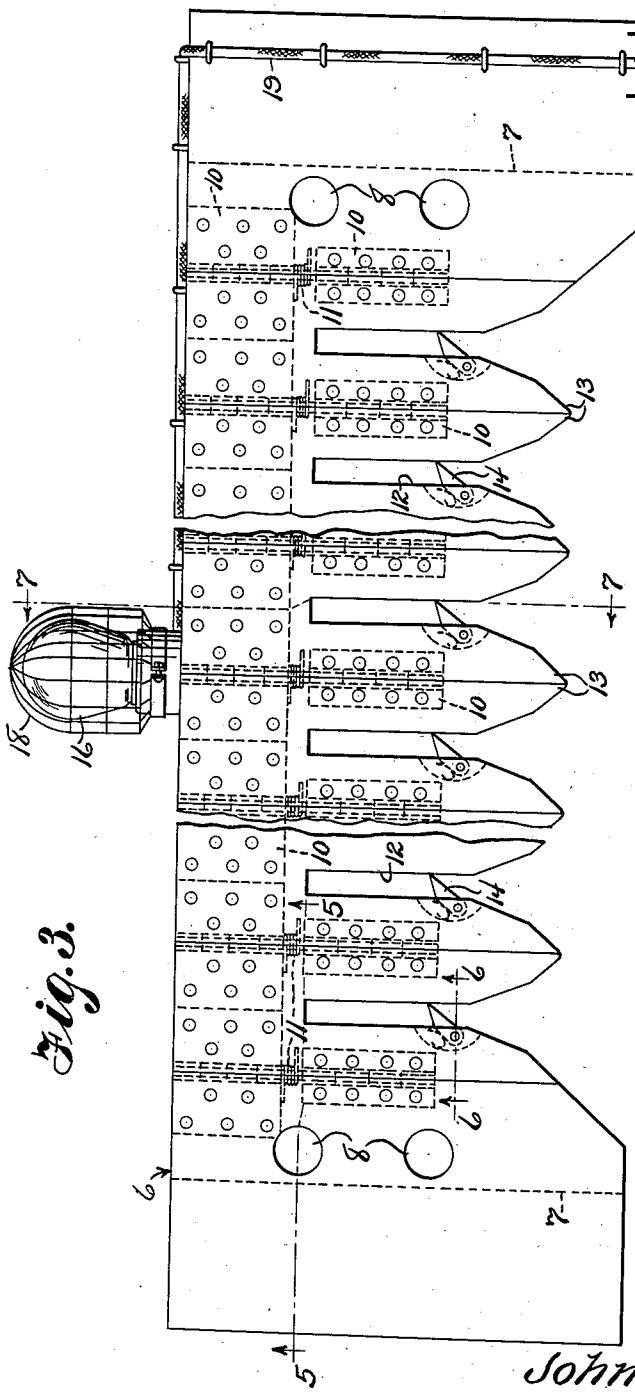


Fig. 3.

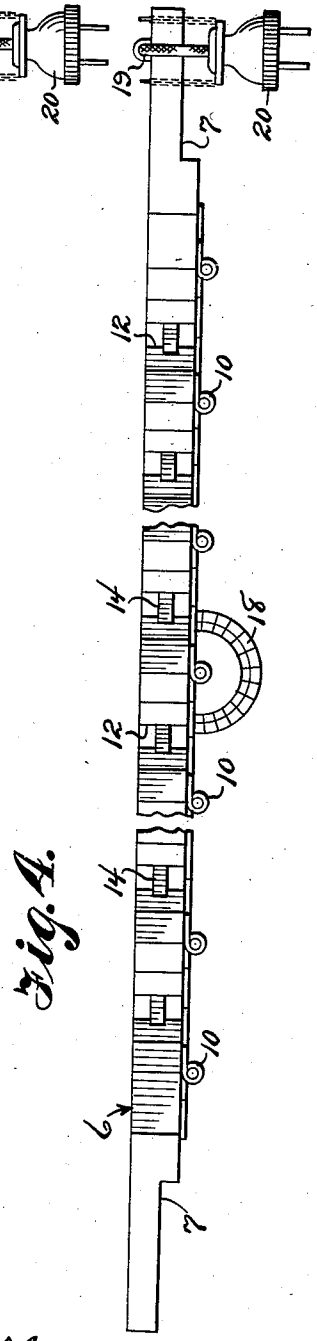


Fig. 4.

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2,076,476

AERIAL MAIL CATCHER

John Mores, Millsboro, Pa.

Application April 22, 1936, Serial No. 75,801

2 Claims. (Cl. 258—1)

This invention relates to aerial mail catchers especially adapted to permit mail bags to be caught and taken up by an aeroplane while in flight and has for the primary object the provision of a device of this character which will releasably support mail bags at a desired elevation to be caught by means on an aeroplane after which said means may be employed to draw the mail bags to the aeroplane for loading therein.

With these and other objects in view, this invention consists in certain novel features of construction, combination and arrangement of parts to be hereinafter more fully described and claimed.

For a complete understanding of my invention, reference is to be had to the following description and accompanying drawings, in which

Figure 1 is a front elevation illustrating an aerial mail bag catcher about to be contacted by an aeroplane and constructed in accordance with my invention.

Figure 2 is a view similar to Figure 1, showing the mail bag in the act of leaving the support after being contacted by the means carried by the aeroplane.

Figure 3 is a top plan view illustrating a mail bag attaching means adapted for being releasably supported and equipped with means to receive and grip means carried by the aeroplane when contacted therewith.

Figure 4 is an edge view illustrating said mail bag attaching means.

Figure 5 is a fragmentary sectional view taken on the line 5—5 of Figure 3.

Figure 6 is a fragmentary sectional view taken on the line 6—6 of Figure 3.

Figure 7 is a transverse sectional view taken on the line 7—7 of Figure 3.

Referring in detail to the drawings, the numeral 1 indicates a tower forming a support for a mail bag and its attaching means so that said means and the mail bag will be positioned at a desired height from the ground to permit a means carried by an aeroplane to contact the mail bag attaching means without endangering the safety of the aeroplane while in flight. The upper end of the tower includes spaced parallel portions 2, the upper edges forming rests 3. A platform 4 is carried by the tower 1 below the rests 3 on which may be positioned mail bags or similar devices.

A mail bag attaching member 6, of elongated formation has its upper face at its ends cut away, as shown at 7, to engage with the rests 3. The member 6 adjacent its ends is provided with openings 8 to receive flexible elements 9 connected with a mail bag or the like and permitting said flexible elements to be readily tied to the member 6. The member 6 is composed of a plurality of sections connected by hinges 10. The hinges are equipped with springs 11 engaging the sections to resist the hinging movement of the sections relative to each other. A plurality of slots 12 are formed in the member 6 and open outwardly through one edge thereof. The slots 12 define prongs or forks 13. Each section has a pair of prongs or forks. The free ends of the prongs diverge so as to provide comparatively wide entrances to the slots. One prong of each pair of prongs has pivoted thereto a spring pressed dog 14 normally occupying a position to close the respective slot. However, the dogs are capable of pivoting when engaged by a flexible element 15 secured to an aeroplane. The element 15 after entering a slot is prevented from moving back out of the slot by the dog assuming slot-closing position.

The flexible element 15 is suitably connected to the aeroplane and carries at its free end a ball 16. The ball is of a size which will not move through a slot 12 when the flexible element extends through the slot. The flexible element 15 is controlled from a point within the aeroplane and when it is desired to pick up a mail bag or like device carried by the tower the flexible element is lowered, and the aeroplane flown over the tower, the flexible element entering one of the slots 12. As the ball cannot pull through the slot, the mail bag attaching member 6 as well as the mail bag is lifted from the tower, as shown in Figure 2, the member 6 folding as it leaves the rests 3 to facilitate the mail bag moving out of the space between the portions 2 of the tower. After the mail bag is attached to the flexible elements of the member 6, said flexible elements may be drawn up within the aeroplane by any suitable means (not shown) so that the mail bag as well as the member 6 may be lifted into the aeroplane.

An electric lamp 16 is mounted intermediate the ends of the member 6 and at one edge thereof and is equipped with a suitable guard 18. Electrical conductors 19 are connected to the electric lamp and to the member 6 and are equipped with a detachable electrical connector 20 capable of being plugged into an electrical output carried by the tower and (not shown). The purpose of the electric lamp is to illuminate the mail bag attaching member 6 to guide the pilot of the aeroplane to the device at night time. As the

member 6 and the mail bag attached thereto leaves the tower, the connector 20 releases from the electrical output.

Having described the invention, I claim:

1. An aerial mail catcher comprising a tower including spaced rests, a member having its ends resting on said rests and including a plurality of hingedly connected sections and each section consisting of prongs diverging in the direction of the free ends thereof and providing therebetween slots, means for connecting a mail bag to said member, a flexible element connected to an aeroplane and having an enlargement at its free end to enter any one of the slots on the aeroplane passing over said member, and a spring pressed dog pivoted to a prong of each section and normally contacting the companion prong of said section to permit the flexible element to pass into the slot of said section and then close the entrance to the slot.

2. An aerial mail catcher comprising a tower including spaced horizontally disposed rests, a member having the ends thereof positioned on said rests and including a plurality of sections and each section provided with a slot opening outwardly through one edge of the member, each section having prongs adjacent said slot diverging in the direction of the free ends thereof, hinges connecting said sections and preventing folding of said sections when the member is supported by the rests and permitting said sections to swing relative to each other when the member is disengaged from the rests, means for connecting a mail bag to the ends of said member, and a flexible element connected to an aeroplane and having an enlargement at its free end to enter any one of the slots on the aeroplane passing over said member.

JOHN MORES.