July 19, 1949. I. L. MALTBA 2,476,379

TRUMPET FOR DRAWING FRAMES

Filed Feb. 26, 1946

Fig. 1.

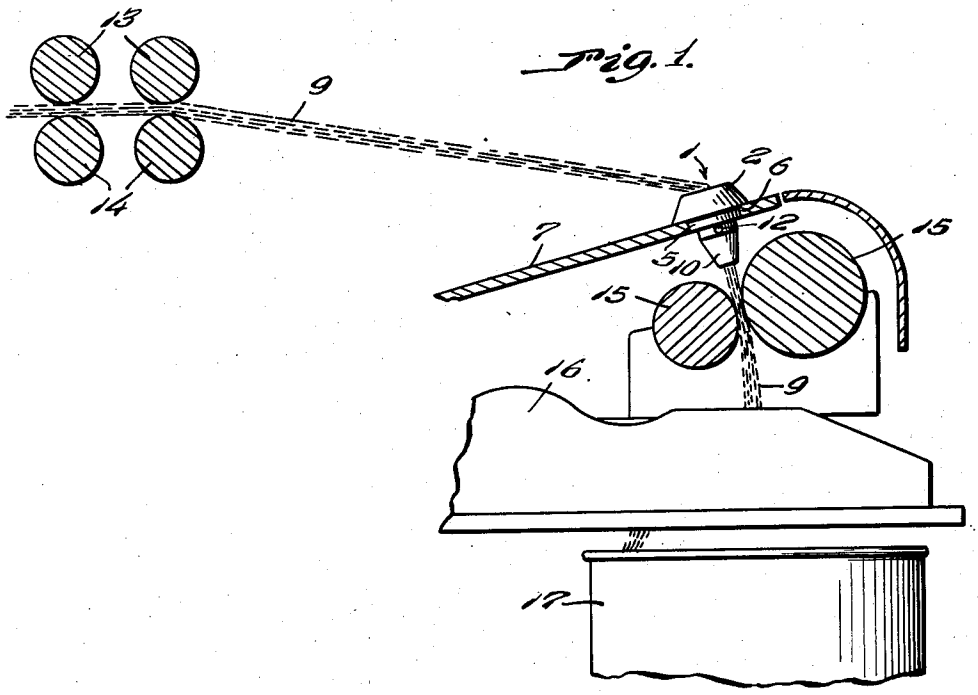


Fig. 2.

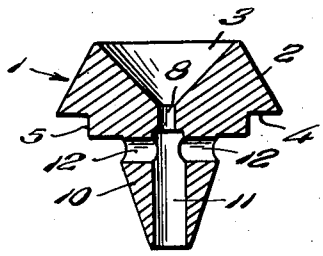


Fig. 4.

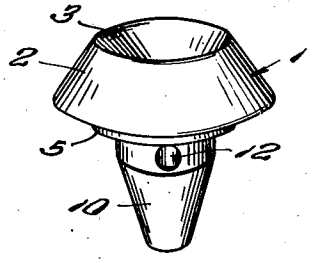
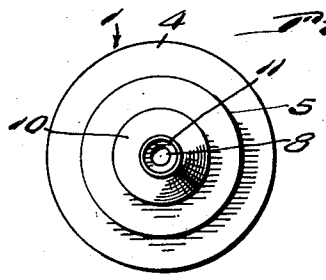


Fig. 3.



Inventor

I. Lee Maltba

By Clarence A. O'Brien and Harvey B. Jacobson

Attorneys

Patented July 19, 1949 2,476,379

UNITED STATES PATENT OFFICE

2,476,379

TRUMPET FOR DRAWING FRAMES

Ira Lee Maltba, Gastonia, N. C., assignor, by direct and mesne assignments, of twenty per cent to Carl A. Wilson, twenty per cent to Yates D. Smith, twenty per cent to Dean French, and twenty per cent to Julius T. Sanders, all of Gastonia, N. C.

Application February 26, 1946, Serial No. 650,219

1 Claim. (Cl. 19—157)

1

This invention relates to an improved form of trumpet for a drawing frame.

An object of the invention is to provide an improved trumpet which may be readily supported on a trumpet lever in an aperture formed therein, and said trumpet being so formed that it may be readily adapted to operate with various types of drawing frames.

Another object of the invention is to provide an improved trumpet for a drawing frame in which the entrance passage in the trumpet is of a smaller diameter than the outlet passage therefrom, whereby should the trumpet become stopped up or begin to run singles, the extra space in the lower end thereof will permit the cotton to expand and break, thereby immediately stopping the frame.

A further object of the invention is to provide an improved trumpet for a drawing frame which will be formed with a restricted entrance passage and an enlarged delivery passage, together with laterally formed openings through the lower portion of the trumpet communicating with said enlarged delivery passage whereby should the trumpets become stopped up or begin to run singles, the extra size of the outlet passage and lateral interconnecting openings will permit the weakened sliver to expand and break, thus immediately stopping the frame.

A still further object of the invention is to provide an improved trumpet for any type of drawing frame which will be highly efficient in operation and relatively inexpensive to manufacture and produce.

Other objects will appear as the description proceeds.

In the accompanying drawings which form a part of this application,

Figure 1 is a view partly in section showing the improved trumpet mounted through a trumpet lever of a drawing frame;

Figure 2 is an enlarged longitudinal sectional view taken through the improved trumpet;

Figure 3 is a bottom plan view of the improved trumpet, and

Figure 4 is a perspective view of the improved trumpet.

Like characters of reference are used throughout the following specification and the accompanying drawings to designate corresponding parts.

The improved trumpet comprises a unitary body generally indicated by the reference numeral 1 formed of steel or any other desired and suitable material.

2

The head or upper portion of the trumpet is of frusto conical formation having an outwardly and downwardly tapering peripheral outer surface 2, and a funnel-shaped throat or entrance passage 3 formed in the upper end of said head or upper portion. The lower end of said peripheral outer surface 3 is under-cut to form an annular positioning seat 4 and an adjacent shank portion 5 of reduced diameter to extend through and to form a snug fit in the aperture 6 formed in the trumpet lever 7.

The lower portion of the funnel-shaped throat 3 merges with the downwardly or axially extending reduced entrance passage 8 through which the cotton sliver 9 is adapted to pass.

The lower extremity of the shank portion 5 is tapered to provide a frusto conical outlet end 10. An enlarged delivery passage 11 is formed through the lower portion 10 of the trumpet in axial alignment with the reduced entrance passage 8, and merges therewith. A set of laterally and radially extending openings 12 are formed through the wall of the lower portion 10 of the trumpet body 1 and connect with diametrically opposite sides of the upper end of the enlarged delivery passage 11, whereby if the cotton sliver 9 is weakened while passing through the reduced entrance passage 8, the enlarged space formed by the passage 11 and openings 12 permits the cotton sliver to expand and break, thereby immediately causing the trumpet to rise and operate the knock-off mechanism to stop the drawing frame without permitting waste to pile up at the entrance to the trumpet.

In the drawings, the upper and lower drawing rolls are indicated by the reference numerals 13 and 14, respectively, and the calendering rolls 15 are located immediately below the outlet end 10 of the trumpet 1. The usual coiler head 16 will be supported below the calendering rolls 15, and a can 17 will be provided for the reception of the cotton sliver 9 after it has passed through the calendering roll and coiler.

It will be understood that the improved trumpet may be used equally well with any type of drawing frame, of which there are a considerable number.

While the preferred embodiment of the instant invention has been illustrated and described, it will be understood that it is not intended to limit the scope of the invention thereto, as many minor changes in detail of construction may be resorted to without departure from the spirit of the invention.

Having thus described my invention what I

claim as new and desire to secure by Letters Patent of the United States is:

In a trumpet, the combination of a unitary body including a head portion and a shank portion extending therefrom, an entrance passage in said head portion, a cylindrical delivery passage in said shank portion, and a diametrically reduced passage connecting said entrance and delivery passages, said shank portion being formed with a set of radial openings communicating with diametrically opposite sides of said delivery passage, whereby a sliver passing through the delivery passage may expand laterally in opposite directions.

IRA LEE his × mark MALTBA.

Witness to mark:
J. MACK HOLLAND, JR.

REFERENCES CITED

The following references are of record in the file of this patent:

UNITED STATES PATENTS

Number	Name	Date
217,170	Tibbetts	July 1, 1879
547,232	Threlfall	Oct. 1, 1895
549,956	Canning	Nov. 19, 1895
1,303,833	Saus	May 13, 1919
2,385,448	Kershaw et al.	Sept. 25, 1945

FOREIGN PATENTS

Number	Country	Date
524,887	Great Britain	Aug. 16, 1940