Sept. 8, 1931. A. D. EITZEN 1,822,770

TICKER TAPE CONTROLLING MEANS

Filed March 26, 1929

Fig. 1

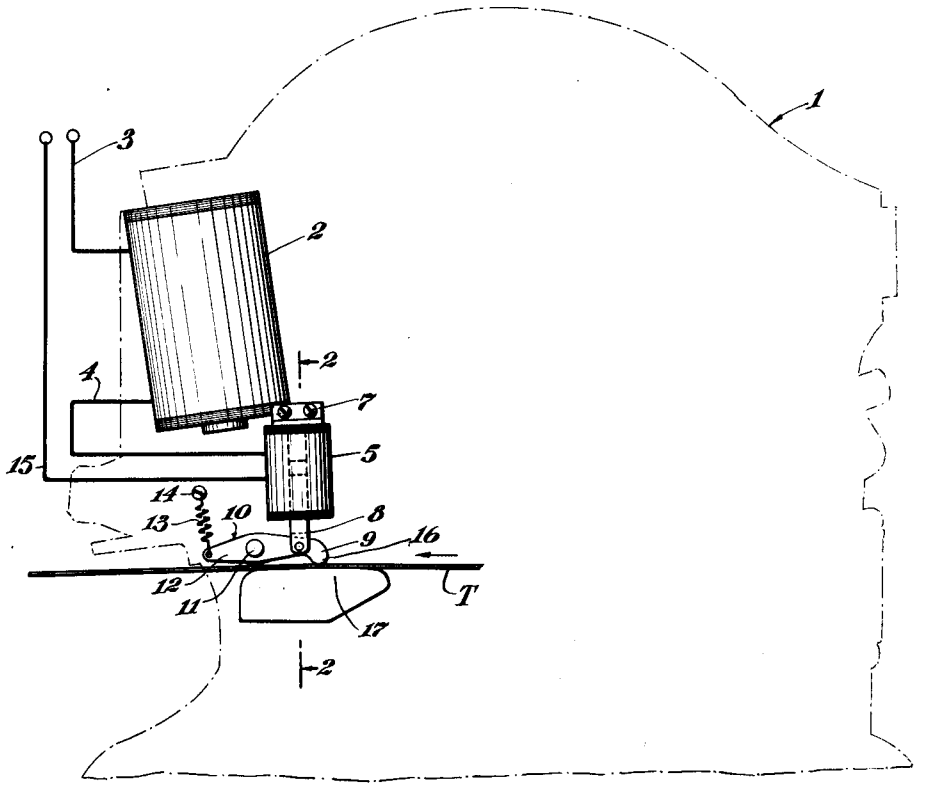


Fig. 2

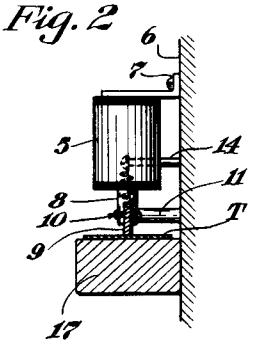
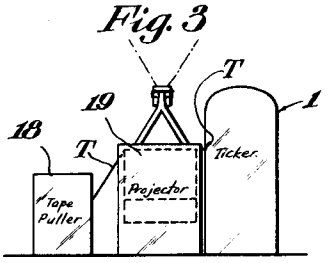


Fig. 3



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TICKER TAPE CONTROLLING MEANS

Application filed March 26, 1929. Serial No. 350,112.

This invention relates to stock quotation projecting machines in general and more especially to means for controlling the tape as it issues from the ticker.

Among the objects of the present invention it is aimed to provide improved means for controlling the tape as it issues from the ticker whereby the tape is anchored against movement when the ticker is at rest.

It is still a further object of the invention to provide improved tape controlling means whereby the tape is anchored against movement when the ticker is at rest and means operably associated with the ticker are provided for releasing the tape locking means when the ticker operates.

These and other features, capabilities and advantages of the invention will appear from the subjoined detail description of one specific embodiment thereof illustrated in the accompanying drawings in which

Figure 1 illustrates a ticker diagrammatically in dash and dot lines and shows in full lines the tape locking means;

Fig. 2 is a section on the line 2—2; and

Fig. 3 is a diagrammatic means showing a tape puller, projecting machine and ticker in operative relation with one another.

In the embodiment shown, the ticker 1 is provided with its usual magnet 2 connected by the conductor 3 to the transmitting line and by the conductor 4 to the magnet 5 secured to the wall 6 of the ticker by the bracket 7. The magnet 5 has an armature 8 reciprocably mounted in the same, the lower end of which is pivotally connected to the long arm 9 of the lever 10 pivoted at 11 to the wall 6 of the ticker housing. The short front arm 12 of the lever 10 is connected by the spring 13 with the abutment 14 secured to the wall 6 of the ticker housing 1. The magnet 5 is connected by the conductor 15 with the other terminal of the transmission line. The arm 9 is provided with a downwardly extended rounded finger portion 16 to engage the tape T when the ticker is at rest and press it into engagement with the supporting block 17 secured to the side 6 of the ticker housing 1.

From the foregoing it will appear that as a message is transmitted, the current will pass through the conductors 3 and 15 energizing the magnets 2 and 5, the magnet 2, in the present instance, forming a part of the usual ticker mechanism from which the several operating parts of the ticker are operated, and the magnet 5 being an auxiliary magnet operated to attract the plunger 8 when it is energized thereby to withdraw the arm 9 from engagement with the tape T and permit the tape puller 18 to draw the tape through the projector 19. In turn, when the ticker comes to rest and the magnets 2 and 5 are de-energized, the arm 9 will be liberated to permit the spring 13 again to press the finger 16 into engagement with the tape T and lock the tape T in engagement with the support 17 against further movement by the tape puller 18. This mechanism is particularly adapted for use with a continuously operated tape puller, such as illustrated in my copending application Serial No. 343,363, provided with a frictional tape pulling roller which will slip relative to the tape when the tape T is locked in engagement with the support 17 when the ticker is at rest.

From the foregoing it will appear, therefore, that the printing mechanism of the ticker 1 is at all times protected from being moved out of alinement by any undue pull on the tape.

It is obvious that various changes and modifications may be made to the details of construction without departing from the general spirit of the invention as set forth in the appended claims.

I claim:

1. The combination with a ticker, of a tape puller, a support, a lever frictionally to impinge the tape against said support for locking the tape against movement by said tape puller when said ticker is at rest, and a magnetic device for actuating said lever when said ticker operates to break said frictional contact.

2. The combination with a ticker having a magnet, of a tape puller, a lever frictionally to engage the face of said tape for locking the tape against movement by said tape puller when said ticker is at rest, and a magnetic device connected to said ticker magnet

to cause said lever to break the frictional contact on said tape to liberate said tape when said ticker magnet is energized.

3. The combination with a ticker, of a tape puller, a lever frictionally to engage the face of said tape for locking the tape against movement by said tape puller when said ticker is at rest, a magnet electrically connected to said ticker to be energized when said ticker operates, and an armature associated with said magnet and operatively connected to said lever to break the frictional contact on said tape to cause said lever to liberate said tape when said magnet is energized.

4. The combination with a ticker, of a continuously operating tape puller arranged to advance the tape as it is discharged from the ticker during the printing action of the ticker and while continuously operating being caused to slip as the result of slippage between its mechanical parts to cease to advance the tape when the slack formed in the tape between the ticker and tape puller is decreased, a finger for engaging the tape to impart a retarding effect on the tape sufficient to cause said slippage to occur when the finger is in operation at the same time that the slack is decreased, and a magnetic device for releasing the tape from the retarding effect of the finger whenever, after the aforesaid condition has been reached, the ticker again starts to print to permit the mechanical parts of the tape puller to cease slipping and again pull the tape.

5. The combination with a ticker, of a continuously operating tape puller arranged to advance the tape as it is discharged from the ticker during the printing action of the ticker and while continuously operating being caused to slip as the result of slippage between its mechanical parts to cease to advance the tape when the slack formed in the tape between the ticker and tape puller has decreased, an abutment, a finger for frictionally pressing the tape against said abutment to impart a retarding effect on the tape sufficient to cause said slippage to occur at the same time that the slack is decreased, and a magnetic device for withdrawing the finger from pressing the tape against said abutment whenever, after the aforesaid condition has been reached, the ticker again starts to print to permit the mechanical parts of the tape puller to cease slipping and again pull the tape.

6. In a device for controlling the feed of ticker tape from the ticker to the tape puller in combination, a continuously operated tape puller adapted to withdraw the tape from the ticker during operation of the ticker, an abutment, a movable member adapted to move toward and from said abutment, the tape in its course to the tape puller passing between said abutment and said member, means to actuate said member to move it against the tape to press the tape against the abutment, means to render ineffective the pulling action of the tape puller when the tape is retarded against advancement without stopping the continuity of the operation of the tape puller, and means to release the member while the ticker is printing, one of said member releasing means including a magnet, said magnet upon energization moving the said member with respect to the said abutment.

7. In a device for controlling the feed of ticker tape, the combination with a ticker of a continuously operating motor, a tape puller, the motor being adapted to drive said tape puller, a support between the ticker and the tape puller, a tape retarding finger positioned in proximity to said support, the tape passing between said support and said finger under the influence of the tape puller during operation of the ticker, means to move the finger toward said support and against the tape to press the tape against said support and retard the further feed of the tape when the ticker stops operating, and a magnet energized as the ticker again commences to operate, the magnet causing the withdrawal of said finger from the tape and permitting the tape puller to again draw the tape as it is ejected from the ticker.

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