Aug. 5, 1941. E. G. DANIELS 2,251,731

TOBACCO HANDLING DEVICE

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Fig. 1.

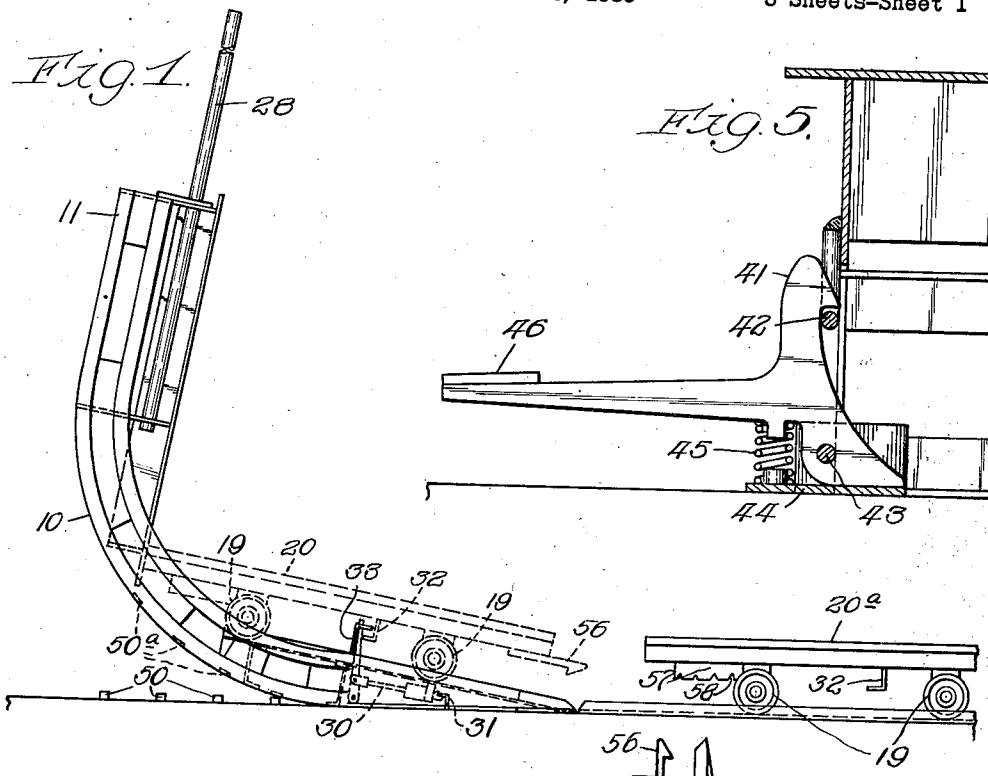
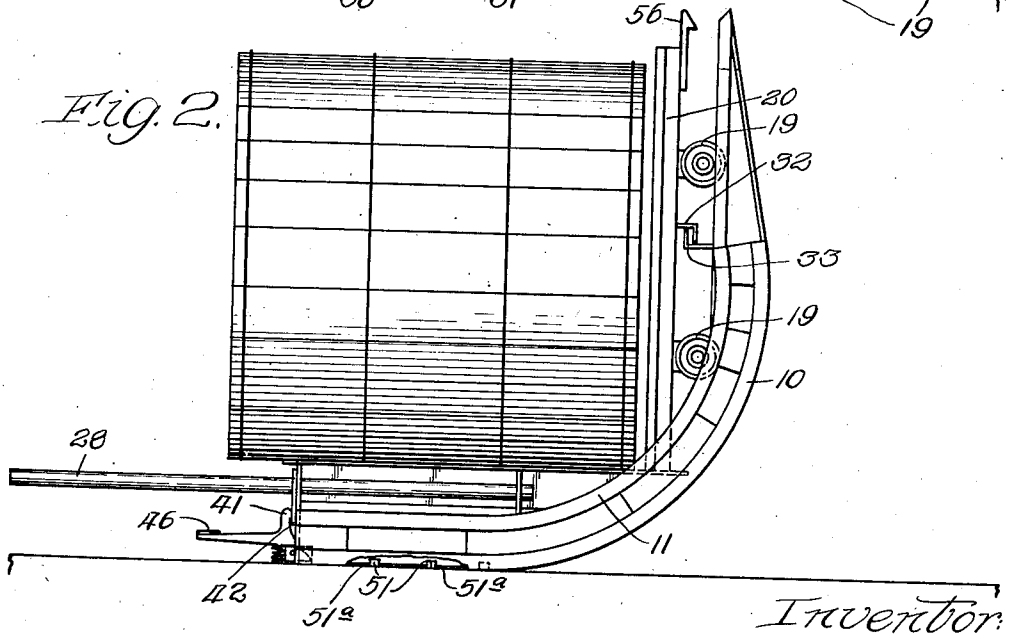


Fig. 5.

Fig. 2.



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Fig. 3.

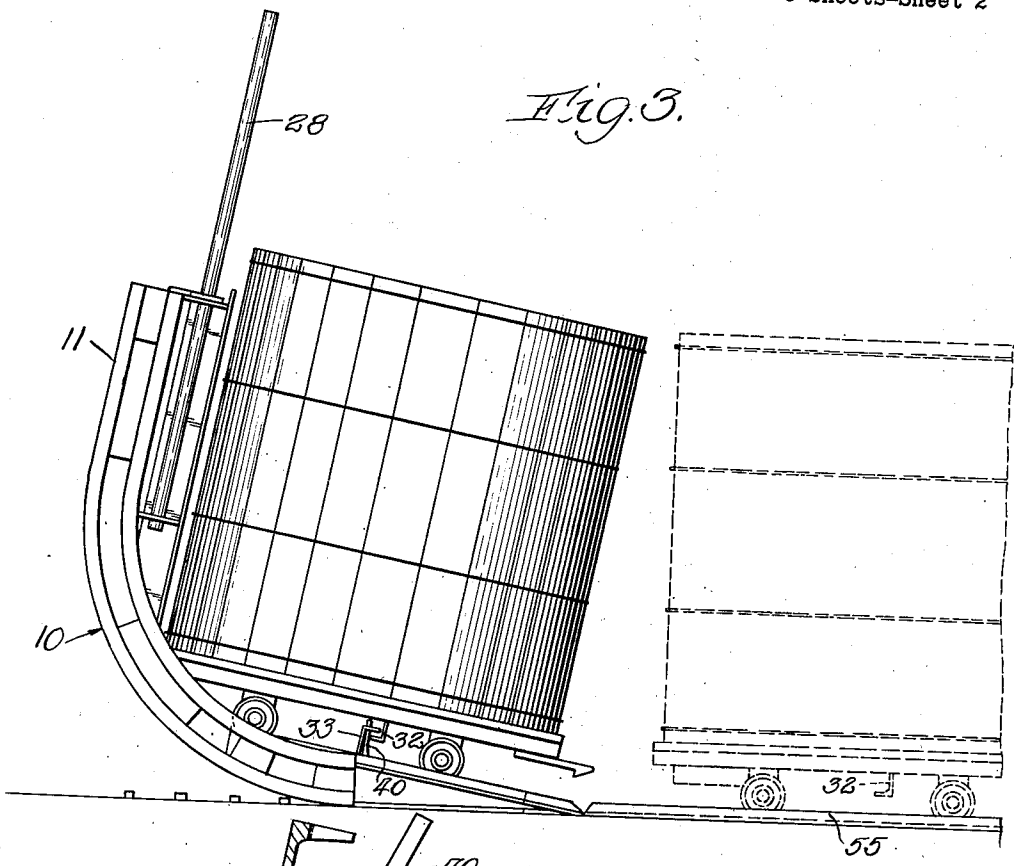
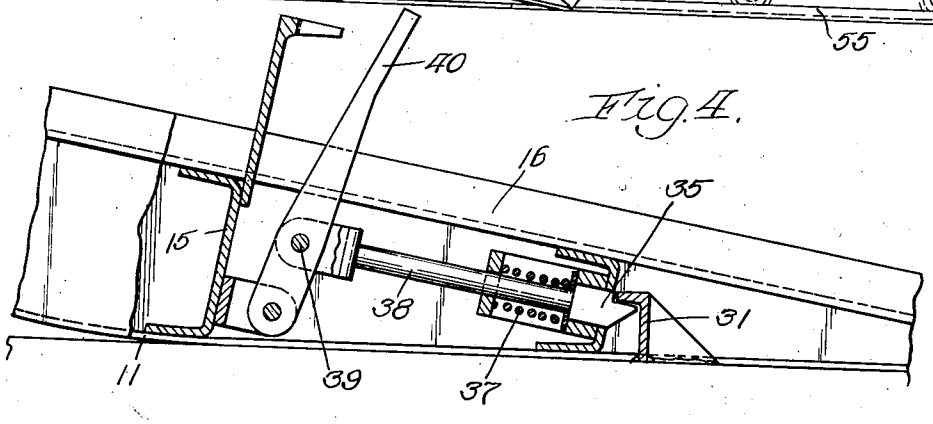


Fig. 4.



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Fig. 6.

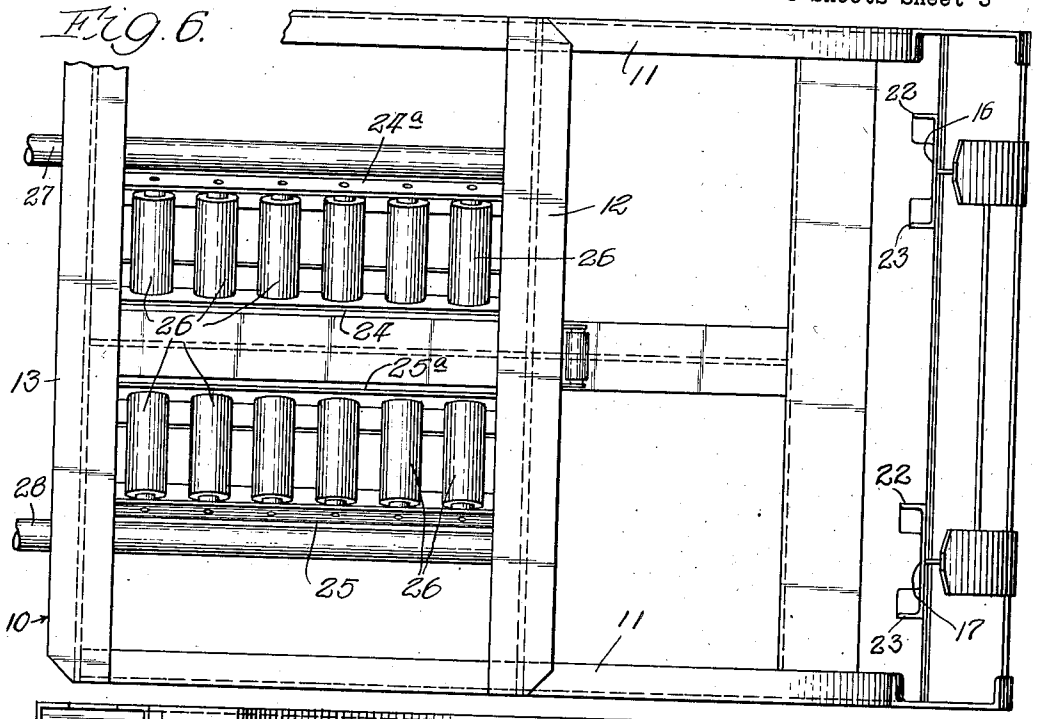
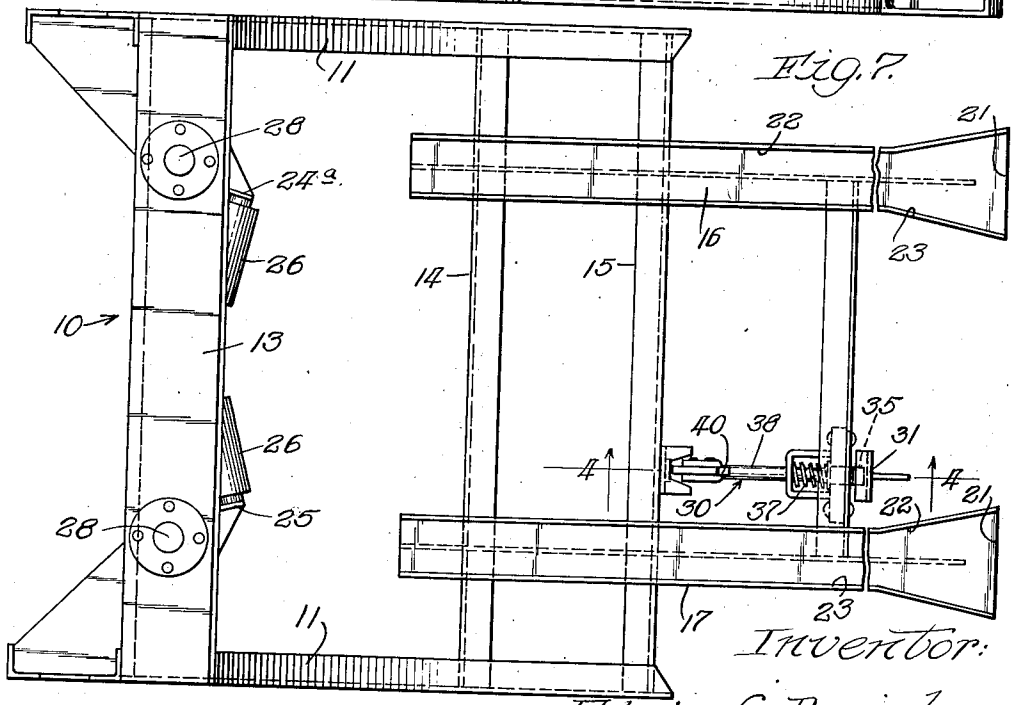


Fig. 7.



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UNITED STATES PATENT OFFICE

2,251,731

TOBACCO HANDLING DEVICE

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Application June 14, 1939, Serial No. 279,182

2 Claims. (Cl. 214—130)

This invention relates to a tobacco handling device and more particularly to a cradle for inverting hogsheads of tobacco.

In the recent advance in tobacco moistening methods which has been occasioned by the method described in Merriam and Wiles Patent 2,080,179, issued May 11, 1937, tobacco hogsheads which weigh in the neighborhood of 1,000 pounds each are customarily delivered for moistening on their sides and have to be turned on end for treatment, or in some cases the reverse may be true. The heavy hogsheads are extremely bulky and handling them is not only difficult but somewhat dangerous.

In accordance with the present invention, means are provided by which a hogshead may be loaded upon a dolly and inverted in the process with great ease and complete safety.

The invention is illustrated in the drawings in which Figure 1 is a side elevation of the loading cradle in dolly-loading position; Fig. 2 is a similar view in hogshead-loading position; Fig. 3 is a view similar to Fig. 1 with the hogshead inverted; Fig. 4 is a detail view partially in section, of the latching mechanism for holding the cradle in dolly-loading position; Fig. 5 is a similar view of the latching mechanism for holding the cradle in hogshead-loading position; Fig. 6 is a plan view of the cradle in hogshead-loading position; and Fig. 7 is a plan view of the cradle in dolly-loading position.

The cradle **10** comprises a pair of curved rocker arms **11** preferably made of steel, which are held together by the braces **12**, **13**, **14** and **15**. At the dolly-loading side a pair of runways **16** and **17** are provided which are secured to the beams **14** and **15** and are spaced to fit the universally mounted wheels **19** of the dolly **20**. The runways are widened at the end, as shown at **21**, and are provided with longitudinal upturned flanges **22** and **23** to act as guides for the wheels of the dolly.

Supports **24**, **24***a*, **25** and **25***a* are carried by the beams **12** and **13** and within these supports are mounted a plurality of rollers **26** which are set at an angle, as shown in Fig. 7, to act as a bed for a hogshead and also to facilitate its movement onto the dolly. Immediately outside of the supports **24***a* and **25** are handles **27** and **28** which extend outwardly beyond the rocker arms and may be utilized to tip the cradle into and out of dolly-loading position.

At the dolly-loading side of the cradle there is provided a latching mechanism **30** which co-acts with a stop **31** on the floor of the handling room. The latching mechanism comprises a beveled slide member **35** which is normally held in extended position by the spring **37** mounted upon the arm **38**. The arm **38** is pivotally mounted at **39** on the crank member **40**. The slide member **35** is released by an extension of the angle iron which forms a catch member **32** on the bottom of the dolly **20**. Thus the loading of the dolly upon the cradle automatically releases the cradle from the floor as soon as the dolly is in its final position.

The dolly **20** is provided with a pair of hooked catch members **32** on its underside which catch upon the complementary members **33** which are mounted on the rocker arms of the cradle. The dolly is thus permitted to hang in the position shown in Fig. 2.

The cradle is locked in hogshead-loading position by the mechanism shown in detail in Fig. 5 which consists of a dog **41** which locks on the catch **42**. The dog is pivotally mounted at **43** in a plate **44** on the floor of the room. A spring **45** normally presses the dog into engagement from which it may be released by pressure upon the foot pedal **46**.

In order that the catch members shall cooperate in locking the cradle in its various positions, a plurality of studs **50** and **51** are provided in a track on the floor and these fit into corresponding cavities **50***a* and **51***a* in the rocker arms, thus properly positioning the cradle with reference to the catches in the floor.

In operating the cradle it is tilted into dolly-loading position and a dolly loaded upon it, the dolly being properly positioned by the guide members **16** and **17**. The cradle is then tilted by the handles **27** and **28** into hogshead-loading position. It is locked in this position by the dog **41** and is held there while a hogshead is loaded upon the rollers **26**, preferably from the side. Pressure is then applied to the foot pedal **46** releasing the cradle from the hogshead-loading position and it is tilted back to the dolly-loading position as illustrated in Fig. 3. The dolly then will roll off of the cradle under its own momentum and the process may be repeated.

Preferably a track **55** is provided on the floor of the room to handle the dolly loading and unloading. The dollies each are provided with coupling members **56** which engage a complementary locking member **57** which is provided with a plurality of teeth **58**. The latter provide a series of positions in which the dollies automatically couple, depending upon the size of the hogsheads which they are carrying. Inasmuch as

the size of the hogsheads varies considerably, this enables the dollies to be coupled in taut relationship regardless of the size of the hogsheads.

What I claim as new, and desire to secure by Letters Patent, is:

1. A device of the character described, including: two parallel vertically disposed quadrant rockers adapted to be rocked on a support through an arc of substantially ninety degrees from load receiving position to vehicle receiving position, and vice versa; extensions at one end of the rockers with load supporting means lying close to said support and adapted to receive a load thereon, when the device is in load receiving position; extensions at the other end of the rockers with runways lying close to said support and adapted to receive a vehicle thereon when the device is in vehicle receiving position; and means for securing a vehicle on the runways; whereby, the device with a load and vehicle thereon may be rocked from load receiving position to vehicle receiving position to transfer the load to the vehicle.

2. A device as claimed in claim 1 with cross members connecting the rockers, said runway extensions being carried by said cross members.

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