April 22 , 1924. 1,491,734

H. H. PAYZANT

MARKING DEVICE FOR LUMBER

Filed Sept. 21 , 1921 2 Sheets-Sheet 1

Fig. 1.

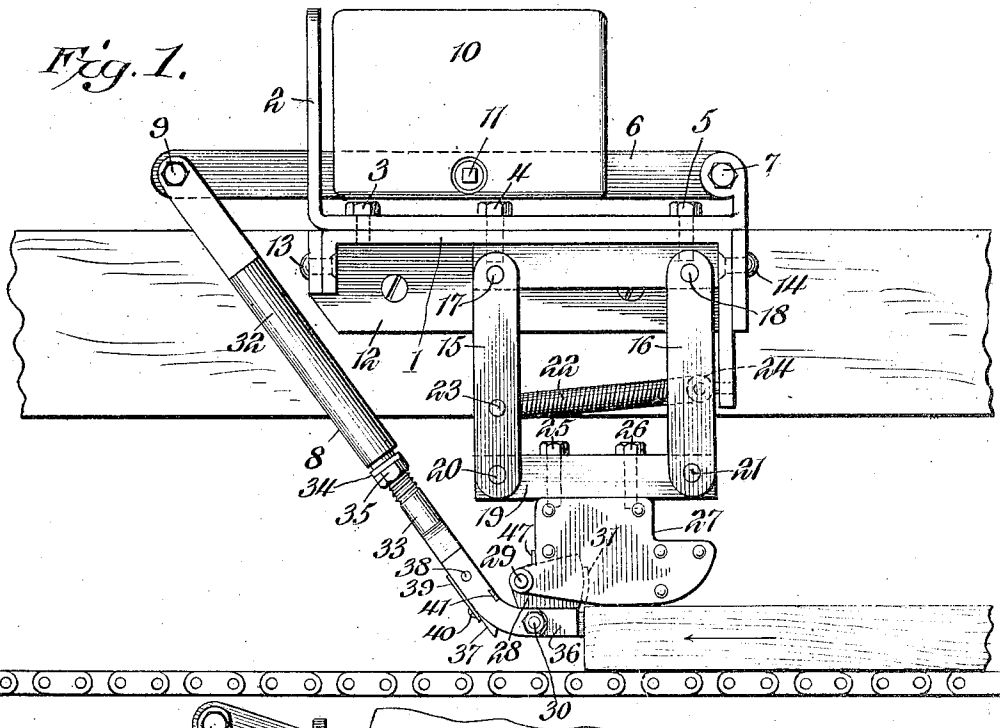
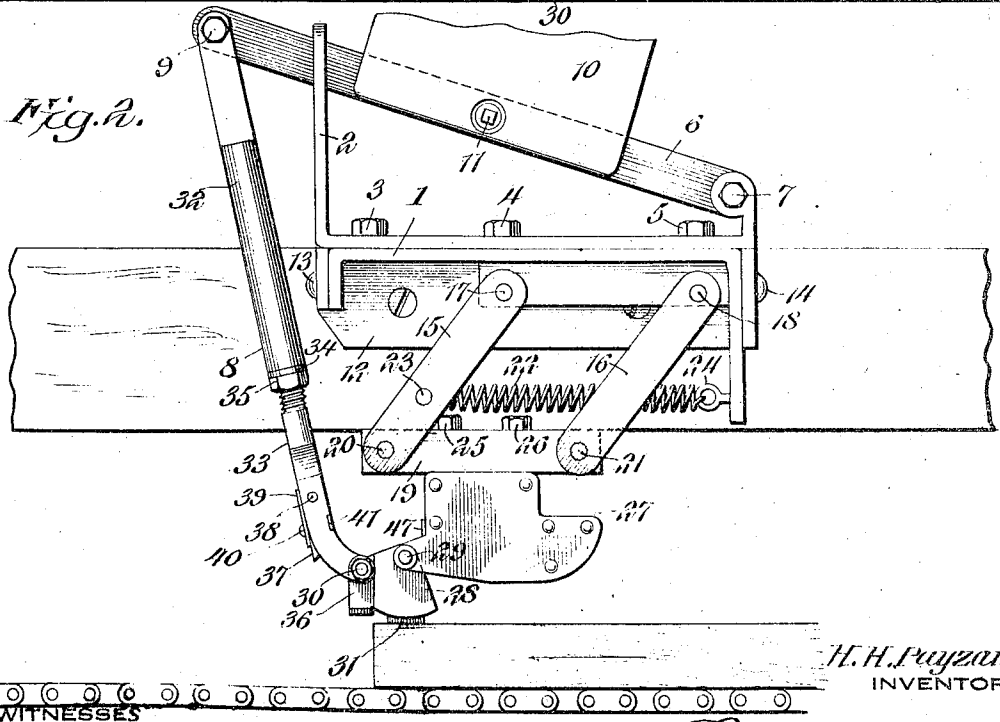


Fig. 2.



WITNESSES

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Fig. 3.

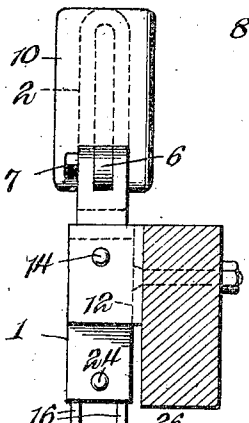


Fig. 4.

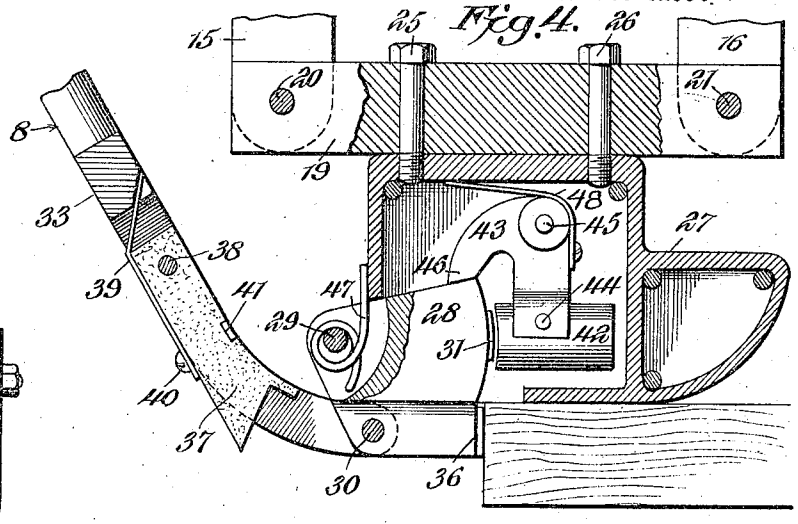


Fig. 5.

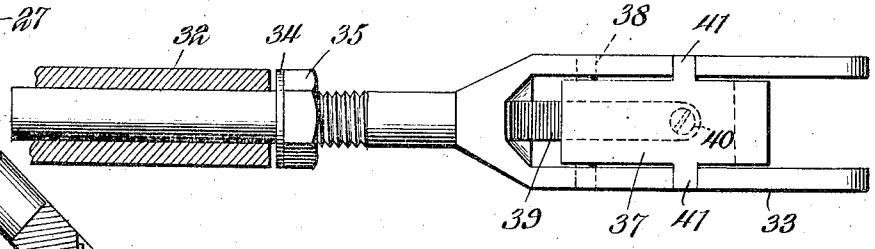
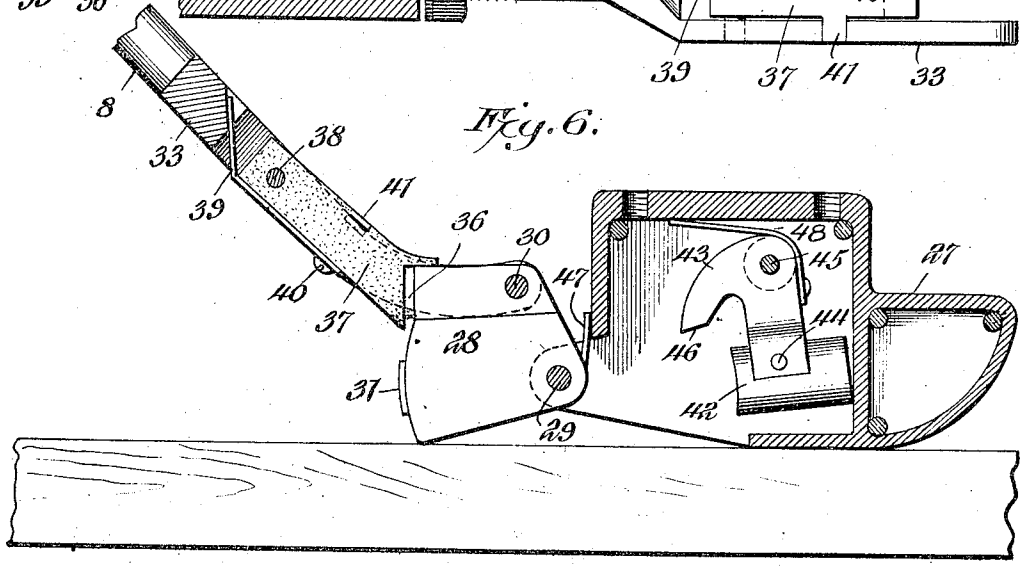


Fig. 6.



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Patented Apr. 22, 1924.

1,491,734

UNITED STATES PATENT OFFICE.

HENRY HARRIS PAYZANT, OF EVERETT, WASHINGTON, ASSIGNOR TO WEYERHAEUSER TIMBER COMPANY, OF EVERETT, WASHINGTON.

MARKING DEVICE FOR LUMBER.

Application filed September 21, 1921. Serial No. 502,176.

To all whom it may concern:

Be it known that I, HENRY H. PAYZANT, a citizen of the United States, residing at Everett, in the county of Snohomish and State of Washington, have invented a new and useful Marking Device for Lumber, of which the following is a specification.

This invention relates to means for marking lumber, one of its objects being to provide a device which will apply a trademark or other mark to lumber. The term "lumber" as herein used includes logs, boards, planks and the like unless the context prohibits such construction.

By means of the invention, lumber may be marked either at the end or on the side, or both on the end and on the side, in one operation. The word "side" as here used includes the top and bottom as well as the other lateral faces of the lumber. The lumber thus marked may be moving in any convenient direction.

The invention may be employed at any convenient point in the working of lumber, especially anywhere that lumber is being moved by chains, rolls or other means, as for example, behind a planer. Among the many advantages of this invention may be noted its convenience of installation, its simplicity of construction and operation, cheapness of manufacture, efficiency and durability in use.

The accompanying drawings illustrate one form of the invention, it being understood that various other forms and embodiments may be employed without departing from the invention herein described and claimed.

Fig. 1 is a side elevation of the device in use showing it in its normal position and immediately before contact with moving lumber.

Fig. 2 is a similar elevation showing the side stamp in operation upon the lumber which has moved from right to left.

Fig. 3 is an end elevation of the device looking from the right, as viewed in Fig. 1.

Fig. 4 is a longitudinal sectional view of the hollow block containing the surface and end stamping devices and adjacent parts.

Fig. 5 is a plan view of the lower portion of the return arm for the die-block.

Fig. 6 is a view similar to Fig. 4 and showing another position of the die-block.

Referring to the drawings, the device consists of a supporting bar 1 which is suitably attached to some permanent part of the woodworking machine, such as the wooden frame-work shown in Figs. 1 and 2. Upon the supporting bar 1 is fastened angle bar 2 by means of screws 3, 4 and 5. Angle bar 2 carries one end of weight bar 6, being fastened thereto by screw 7. The other end of weight bar 6 is connected to telescoping fork arm 8 by means of screw 9. Weight bar 6 passes freely through a suitable slot in angle bar 2, before reaching telescoping fork arm 8. Weight 10 rests upon weight bar 6, being movable along the same and locked in the desired position by means of screw 11.

Supporting bar 1 is connected with bar 12 by means of rivets 13 and 14, the said rivets 13 and 14 being fitted loosely so as to form a hinge. Extending downwardly from supporting bar 1 are parallel bars 15 and 16, which are hinged to bar 12 by pins 17 and 18, and are hinged to bar 19 by pins 20 and 21. This provides a parallel motion for the parts carried thereby. Tension coil spring 22 is connected to parallel bar 15 by pin 23, and to supporting bar 1 by screw eye 24. The spring tends to return the parts to the position shown in Fig. 1.

Attached to bar 19 by screws or bolts 25 and 26 is block 27 which supports segment 28 by means of screw 29, and forms a housing therefor. Block 27 or housing has a shoe at its front end, is made hollow with an opening in its bottom and contains and encloses means for inking the surface marking stamp when within the housing as will be hereinafter described. The housing 27, through the parallel motion means 15, 16 and the spring 22, is normally held in the path of the traveling lumber, but is yieldable to the passage of the latter, as shown in Figs. 1 and 2.

Segment 28, besides being pivotally connected to block 27 by screw 29, is pivoted to telescoping fork arm 8 by pin 30, thus allowing the segment to swing, as shown in Figs. 2 and 6. The segment 28 carries a surface-marking die 31.

The telescoping fork arm 8 is attached to weight bar 6 by screw 9. The fork arm includes an upper portion 32 and a lower por-

tion 33 sliding in the upper portion 32 until stopped by washer 34 which contacts with the upper portion. The space between the end of the upper portion 32 and washer 34 is adjustable by means of nut 35.

The telescoping fork arm 8 carries at its lower end an end stamping die 36, preferably removably attached by screw 30 and forming a part of the segment 28, and an inking mechanism consisting of a sponge-like plug of absorbent nature 37, pivotally mounted in the lower portion 33 of the fork arm by means of pin 38. The plug 37 is held in a normal position by means of a spring 39 mounted by screw 40 to the plug. The movement of the plug against the action of the spring is limited by a stop 41 secured to the plug and resting in notches of the fork arm 8. The end of the plug 37 opposite the end which contacts with the end stamping die 36, is suitably fed with ink or other marking fluid from a reservoir, not shown.

Block or housing 27 contains yieldable means for inking the surface marking die 31. These means consist of a sponge-like or absorbent plug or pad 42 carried by the pivot arm 43 by means of the pin 44. The plug or pad 42 also is suitably fed by a reservoir of ink or other fluid, not shown. Pivot arm 43 is pivotally mounted on pin 45 so that the segment upon re-entering the block or housing 27 contacts with the end 46 of pivot arm 43 and thereby causes the ink plug or pad 42 to contact with the surface marking die 31, as shown in Fig. 1. Spring 47 tends to cause the surface marking die to move as far as possible into the block 27 and in contact with the pad 42, while the spring 48 tends to move the inking means away from the marking member, Fig. 4, showing the pad 42 in contact with the wall of the housing.

The operation of the form of the invention above described, is as follows:

As the lumber moves from right to left its front edge contacts with end stamping die 36 which serves as an abutment as well as a marking stamp, and causing the movement of the lower portion 33 of telescoping fork arm 8 into the upper portion 32 until the washer 34 contacts with the lower end of portion 32. This constitutes a shock absorbing means occasioned by the contact of the die with the lumber. The resistance of the weight 10 and the tension coil spring 22 causes the impact, after contact has been made, of the end of the moving lumber with the end stamping die 36 to be sudden and sufficiently strong to leave the desired marking on the end of the moving lumber. As the lumber continues to move from right to left, the end stamping die is moved upwardly between the arms of the telescoping fork arm, thereby contacting with the inking plug therein located, as shown in Fig. 2. By the same movement the segment 28 is forcibly rotated against the spring 47 and its surface-stamping die 31 is impressed upon the surface of the lumber. The movement of the segment 28 rearwardly and downwardly causes the housing to be raised into the position shown in Fig. 2. As the lumber continues its right to left motion, the segment is still further rotated by reason of the positive action of the lumber against the end surface die, and the friction of the lumber upon the segment, until the surface-marking die is facing toward the left in trailing relation to the housing, and the block 27 is resting on the lumber. (See Fig. 6.) This position of the marking mechanism continues until the lumber is removed from this contact, when the weight 10, with the aid of the tension coil spring 22 and the spring 47, compels the end stamping die and the segment to assume their normal positions. (See Fig. 1.) As the segment returns to its normal position in the block, the surface-marking die is inked by contacting with the inking plug or pad therein contained such contact being positive by reason of the upper edge of the segment contacting with the pivot arm 43, whose other end carries the inking plug against the surface-marking die.

No claim is made in this application for a means for marking moving lumber, comprising a housing normally in the path of movement of the lumber and having a shoe at one end, means for constraining the housing toward the lumber, and yieldable to the passage of the lumber, yieldable inking means enclosed within the housing, and a marking member pivoted to the end of the housing remote from the shoe and movable both within and without the housing, and adapted to engage the yieldable inking means when within the housing, and means connected to the marking member and engaged by the moving lumber to swing the marking member downwardly outside of the housing into contact with the lumber, said housing moving upwardly as the lumber advances and the marking member contacts with the lumber, as this subject matter is embraced in an application filed by me of even date herewith, Serial No. 502,175.

What is claimed is:

1. A means for marking the ends of moving lumber comprising a marking member in co-operation with a telescopic member and a gravity member, the telescopic member connecting the marking member to the gravity member.

2. A means for marking the ends of moving lumber, comprising a marking die movable in the direction of motion of the lumber by contact therewith, a telescopic member connected to the die and means for ex-

erting positive pressure through the telescopic member against the moving of the die by the lumber.

3. A means for marking the ends of lumber, comprising a marking die, a weighted supporting arm therefor adapted to hold said die in the path of the lumber to engage the end of the lumber and mark the same, and means for first absorbing the shock occasioned by the contact of the moving lumber with the die, and then moving the die from the path of the lumber after such engagement of the die with the lumber.

4. A means for marking the ends of lumber, comprising a marking die with means for inking same, a weighted supporting arm adapted to hold said die and to contain said inking means, and telescopic means for causing said die to impact upon the lumber to be marked.

5. A means for marking the ends of lumber, comprising a marking die, a weighted supporting arm adapted to hold said die in the path of the lumber to engage the end of the lumber and mark the same, and mechanism in cooperation with said supporting arm and pivotally connected to said die adapted to force said die against the moving lumber to be marked, and then move the die out of the path of the moving lumber after such engagement of the die with the lumber.

6. A means for marking moving lumber, comprising a support, a weight bar pivoted to the support, a weight carried by said bar, a telescopic member pivotally connected to the weight bar, a printing die pivoted to the lower end of the telescopic member, and inking means carried by said member.

7. A means for marking moving lumber, comprising a support, a weight bar pivoted to the support, a weight carried by said bar, a member pivotally connected to said weight bar and including an upper portion and a lower portion slidable one with reference to the other, means for limiting the sliding movement of said portions, a die carried by the lower end of said member, and an inking means carried by the said member.

8. A means for marking moving lumber, comprising a support, a weight bar pivotally connected to the support, means for guiding and limiting the vertical movement of said weight bar, a weight carried by said weight bar, a member pivotally connected to the outer end of the weight bar and extending downwardly, said member being composed of two portions slidable one with reference to the other, means for limiting the sliding movement of said portions, a printing die carried by the lower end of said member, and inking means also carried by said member and engaged by said die.

9. A means for marking moving lumber, comprising a support, a weight bar pivotally connected to the support, a weight carried by said bar, a member pivotally connected to the outer end of said bar and extending downwardly, a printing die carried by the lower end of said member, and an inking mechanism also mounted in the lower end of said member adjacent the said die and cooperating with the latter.

10. A means for marking moving lumber, comprising a printing die, a member pivotally connected to the printing die and extending upwardly, weight-actuated means connected to said member, said member having a fork at its lower end, and an inking mechanism pivoted between the arms of said fork and cooperating with said die to ink the latter.

11. A means for marking moving lumber, comprising a housing having an opening in its bottom, a printing die pivotally mounted to the housing and movable through the opening in the bottom, inking mechanism within the housing for said die, a second die associated with the first-mentioned die, an upwardly extending member pivoted to the second-mentioned die, and weight-actuated means connected to said member.

12. A means for marking moving lumber, comprising a housing having an opening in its bottom, a printing die pivoted to said housing and movable within and without the same, inking mechanism within the housing and engaged by said die, a second die connected to the first-mentioned die, and weight-actuated means located above the housing and pivotally connected to the second-mentioned die.

13. A means for marking moving lumber, comprising a housing containing inking mechanism and means for constraining said housing into the path of moving lumber and yieldable to the passage of the same, a movable marking member pivoted to the housing and having a normal constraint to enter said housing, and a second marking member associated with the first-mentioned marking member and adapted to be engaged by the end of the lumber to turn both dies on their pivots, the second-mentioned die engaging the end of the lumber and the first-mentioned die contacting with the face of the lumber.

14. A means for marking moving lumber, comprising a hollow housing containing inking mechanism, a movable marking die pivoted to the housing and movable within and without the housing and engaging with the inking mechanism when within the housing, a second die associated with the movable marking die, and weight-actuated means pivotally connected to the second-mentioned die.

15. A means for marking moving lumber, comprising a housing, an end stamping die,

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a side stamping die, the latter being pivotally connected to the housing and movable within the same, the end stamping die depending from the housing in the path of the moving lumber and mechanism for causing said dies to be impressed upon the end and side of the lumber.

16. A means for marking moving lumber, comprising a housing containing inking means, an end stamping die, a side stamping die, the latter being movable within the housing to engage the inking means, the end stamping die depending from the housing in the path of the moving lumber and mechanism for causing said dies to be impressed upon the end and side of the lumber in succession.

17. A means for marking moving lumber, comprising an end stamping die, a side stamping die, said dies being connected to move together, and mechanism for causing said dies to be impressed upon the end and side of the lumber in succession, the end of the lumber engaging the end stamping die first, then moving the side stamping die into contact with the lumber, and finally removing both dies out of contact.

18. A means for marking moving lumber, comprising an end stamping die, a side stamping die, said dies being pivoted at two points and movable together about a pair of axes transverse to the path of the lumber to be marked, and means for impressing said dies upon the lumber.

19. A means for marking lumber, comprising a housing, an end stamping die, a side stamping die, the latter pivoted to the housing, a weight member, and a mechanism cooperating with the weight member to impress said dies upon the lumber, said mechanism being pivoted to the end stamping die.

20. A means for marking lumber, comprising an end stamping die, a side stamping die, a housing for the side stamping die, means for supporting said housing for up-and-down movement, a weight member, and an arm transmitting the opposition of the weight member to the lumber as it contacts with the end stamping die.

21. A means for marking moving lumber, comprising an end stamping die, a side stamping die, said dies being directly actuated by the lumber to be marked, means resisting the movement of the lumber after contact with the end stamping die and adapted to cause it to impact on the lumber, and means for absorbing the shock caused by the movement of the lumber against the marking means.

22. A means for marking moving lumber, comprising an end stamping die, a side stamping die, said dies being mounted to swing on a pair of axes transverse to the path of the lumber to be marked and to mark said lumber by reason of their motion, the end stamping die being arranged in rear of the side stamping die and engaging the lumber first.

22. A means for marking moving lumber, comprising an end stamping die, a side stamping die, said dies being mounted to swing on a pair of axes transverse to the path of the lumber to be marked and to mark said lumber by reason of its motion, and means for applying a force substantially perpendicular to such motion.

24. A means for marking moving lumber, comprising an end stamping die, and a side stamping die, both pivotally mounted to swing on spaced axes, and means adapted to impress said dies upon the end and surface of moving lumber, said means being constructed to impart a sudden quick blow of the dies to the lumber, the end stamping die constituting an abutment and engaging the lumber first to mark the end of the lumber and then move the side stamping die on its pivot to stamp the surface of the lumber.

25. A means for marking moving lumber, comprising a support, an end stamping die, a side stamping die, a housing for the side stamping die, an inking means within the housing for the side stamping die, means for supporting said housing for up and down movement, a weight member, and means connecting the weight member with the end stamping die.

26. A means for marking moving lumber, comprising a housing, parallel motion means connected to the housing and including a spring which normally maintains the housing in the path of moving lumber, and marking means pivotally connected to said housing and adapted to be engaged by the lumber to imprint the latter.

27. A means for marking moving lumber, comprising a housing, parallel motion means for suspending the housing, said means including a spring which normally maintains the housing in the path of moving lumber, said housing formed with a nose at its front end, and a movable marking member pivoted to the rear end of the housing and movable within and without the latter, said housing containing inking means for said movable marking member, and weight-actuated means pivotally connected to said marking member.

28. A means for marking moving lumber, comprising a support, a housing, a side stamping die pivotally connected to the housing, an end stamping die rigidly connected with the side stamping die, a weight member, and means for transmitting the opposition of the weight member to the lumber as it contacts with the end stamping die, said means being pivotally connected to the end stamping die.

29. A means for marking lumber com-

prising a housing, a movable marking member therein and pivoted thereto, a second marking member pivoted adjacent to the first marking member, a weighted member, and means connecting the weighted member to the second marking member.

30. A means for marking lumber comprising a housing, a movable marking member therein and pivoted thereto, a parallel-motion means for supporting the housing, a second marking member pivoted adjacent to the first marking member, a weighted member, and means connecting the weighted member to the second marking member.

31. A means for marking moving lumber, comprising a housing, an end stamping die, a side stamping die, said dies being pivoted to the housing and movable about an axis transverse to the path of the lumber to be marked, the side stamping die being movable within the housing, the end stamping die when in normal position being below the plane of the side stamping die so as to be acted upon first by the moving lumber.

32. A means for marking moving lumber, comprising a housing having an opening in its bottom, a marking die pivotally connected to the housing and movable through said opening in the bottom, an inking means having a pivot arm pivotally mounted within the housing, a spring for said arm, and an inking pad connected to said arm, said arm overhanging the face of the pad and located in the path of movement of the marking die as it enters the housing.

33. A means for marking moving lumber, comprising a hollow housing, means for constraining said housing into the path of moving lumber and yieldable to the passage of the same, said housing having an opening in its bottom, a movable marking member pivoted to the housing and movable within and without the latter, a weight-actuated means above the housing, and a member connecting the weight-actuated means to the movable marking member by a pivotal connection.

In testimony, that I claim the foregoing as my own, I have hereto affixed my signature.

HENRY HARRIS PAYZANT.