## A. KIEFFER & H. REBSAMEN.

BRANDING MACHINE.

APPLICATION FILED MAR. 27, 1905. RENEWED APR. 20, 1906.

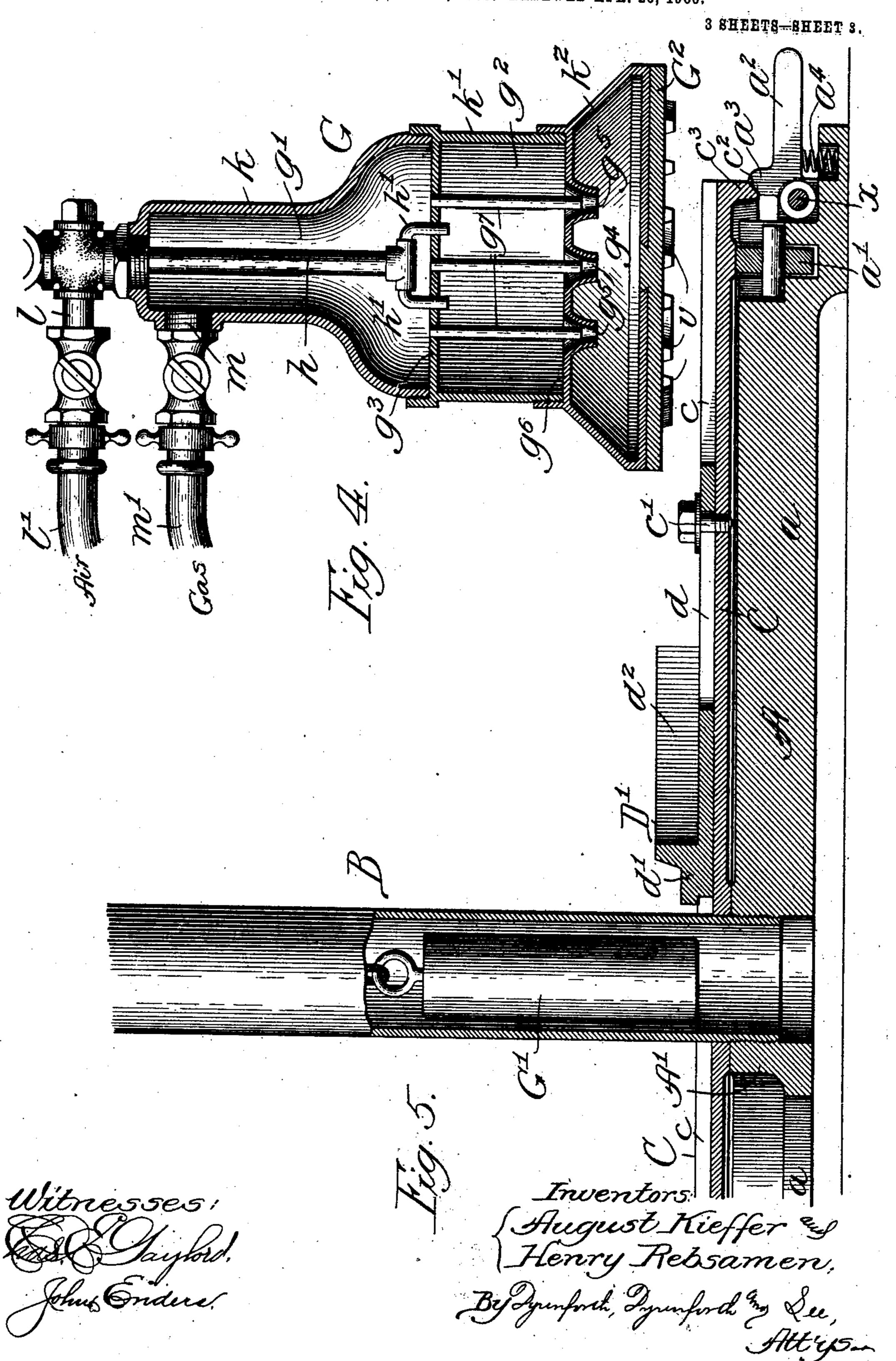
3 SHEETS-SHEET 1. Inventors: Hugust Kieffer Les Kenry Rebsamen,

## A. KIEFFER & H. REBSAMEN. BRANDING MACHINE.

APPLICATION FILED MAR. 27, 1905. RENEWED APR. 20, 1906. 3 SHEETS-SHEET 2. Inventors:
August\_Kieffer &
Henry Rebsamen,

# A. KIEFFER & H. REBSAMEN. BRANDING MACHINE.

APPLICATION FILED MAR. 27, 1905. RENEWED APR. 20, 1906.



### UNITED STATES PATENT OFFICE.

AUGUST KIEFFER AND HENRY REBSAMEN, OF CHICAGO, ILLINOIS.

#### BRANDING-MACHINE.

No. 826,943.

Specification of Letters Patent.

ratented July 24, 1906.

Application filed March 27, 1905. Renewed April 20, 1906. Serial No. 312,779.

To all whom it may concern:

Be it known that we, August Kieffer and Henry Rebsamen, citizens of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented a new and useful Improvement in Branding-Machines, of which the following is a specification.

Our invention relates to an improvement in machines for branding wooden packages, such as boxes, barrels, and the like.

Our object is to provide a machine by which the branding of such articles may be accomplished with facility and expedition.

Referring to the accompanying drawings, Figure 1 is a view in elevation, partly broken, showing the machine of our invention with a barrel in position thereon to be branded. Fig. 2 is a plan view in the nature of a diagram of the rotatable table, showing the hollow column for supporting the branding-head in section. Fig. 3 is a plan view of the base, showing the column in section. Fig. 4 is an enlarged view of the branding-head in vertical sectional elevation, and Fig. 5 a broken section taken at the line 5 on Fig. 2 viewed in the direction of the arrow and enlarged.

A denotes the base of the machine, shown 30 in its preferred form of a series of horizontal arms a, radiating from a center A' and each provided on its upper surface, near its outer end, with a roller a', journaled to extend above the surface of the arm. On one of the arms 35 a beyond its roller is fulcrumed at x, Fig. 5, a lever a<sup>2</sup>, provided with an upwardly-extending stop-lug  $a^3$  and resiliently depressible against a spring a4. A hollow column B, mounted at its lower end in the base center 40 A', extends through the center of a rotatable table or platform C, resting upon the rollers a' to adapt the table to be rotated about the column. The upper surface of the table C is provided with grooves c, radiating from its 45 center and disposed successively at right angles to each other.

D D are bars confined in the grooves to slide longitudinally therein, each being provided with a longitudinal slot d, through which a screw c' passes into the table to secure the sliding bar in any position in its groove to which it may be adjusted for the purpose hereinafter explained. Each bar D carries near its inner end a stop D' for centering the package to be branded relative to a branding-head G, hereinafter described, the

stop shown being a flanged bar bent to form a head d', with arms  $d^2$  diverging from its ends to adapt it especially for use with a barrel type of package. Along one side of each 60 groove c is provided a scale marked at intervals " $\frac{1}{8}$ ," " $\frac{1}{4}$ ," " $\frac{1}{2}$ " and "1" to indicate the points with which the outer ends of the sliding bars should register for effecting the proper positioning of packages of different sizes with relation to the suspended branding-head, these particular indications being intended to denote beer-barrels in the respective sizes of eighths, quarters, halves, and wholes, which different sizes are indicated 70 in dotted lines.

Notches  $c^2$  are formed in the flange  $c^3$ , depending about the edge of the table C—one below each groove c—into any one of which notches the lug  $a^3$  on the lever  $a^2$  may extend 75 to hold the table in one of four positions at which it is required to be arrested for the branding operations.

A hollow arm E extends over the table from the upper end of the column B and has 80 journaled in it a pulley e near one end and near its opposite end a pulley e'. The branding-head G is suspended from the arm E by a flexible medium, such as a cable j, passing over the pulleys e e' down through the column, wherein it carries a weight G' for counterbalancing the branding-head and sustaining it at any position to which it may be raised or lowered relative to a package to be branded supported beneath it on the table C 90 and shown, by way of example, as a barrel H.

While the branding-head may be operated by any suitable power applied in any desired manner, we show as the means for operating 95 it a hand-lever F, fulcrumed at one end on a split sleeve f, surrounding the column B and adjustable thereon to raise and lower it, means being provided in the form of a bolt  $f^2$ , passing through lugs  $f^3$  on the sleeve for 100 clamping it in place. The lever carries between its ends the branding-head G and is provided on its outer end with a handle extension F' for operating it.

The branding-head which we prefer to use 125 as being most desirable, though we do not limit our invention to the use thereof, is that which we have especially devised for our purpose, comprising the following-described construction: The head is a hollow body 110 shown of general bell shape, being formed of a neck-section k, forming a gas-chamber g', a

flanged section k', into which the expanded end of the neck-section is screwed, and forming an air-chamber  $g^2$ , provided with an upper perforated cover  $g^3$  and a lower flanged 5 section  $k^2$ , into which the section k' is screwed, forming the combustion-chamber  $g^4$ , provided with downwardly-projecting jet-openings  $g^5$  in its top  $g^6$ . Vertical gas-tubes  $g^7$ lead from the openings in the cover  $g^3$  into the ro jet - openings  $g^5$ , and an air - pipe h leads through the upper end of the neck-section k downward through the chamber g', in the lower part of which it is provided with branches h', entering the top of the chamber 15  $g^2$  through the cover  $g^3$ . On the bottom of the chamber is supported the branding-plate G<sup>2</sup>, carrying the legend (indicated at v) to be burned into packages to be branded. A valved air-supply pipe l is suitably coupled 20 with the air-pipe h above the branding-head and is connected flexibly, as by rubber hose l', with a source (not shown) of air under pressure, and a valved gas-pipe m, connected by rubber hose m' with the gas-supply (not 25 shown) is connected with the neck k to discharge into the chamber g'.

By the described construction of branding-head G the compressed air which is conducted by the pipe h and its branches h' into the chamber  $g^2$  passes forcibly therefrom through the jet-openings  $g^5$  into the chamber  $g^4$  with the effect of drawing into the latter gas from the chamber g' through the pipes  $g^7$ , and the fuel composed of the air and gas mixture in the latter to heat it and the plate  $G^2$ , the waster products of combustion escaping at the vent-openings  $g^8$ , provided for the purpose. It is within our invention, however, to employ a branding-head heated otherwise than by gas.

The operation of the machine is as follows: The centering-stops D' being adjusted in the proper position for positioning the particular size or sizes of packages to be branded by 45 causing the outer ends of the sliding bars D to register with the proper indications on the scales at the sides of the grooves c, the packages are placed on the rotatable table C and centered thereon against the stops. The ta-50 ble is then rotated until the lug  $a^3$  on the lever  $a^2$  registers with one of the notches  $c^3$ , with which it engages to hold the table in the desired position, the center of the package to be branded being thus brought to a position im-55 mediately below that of the branding-head G. Thereupon the lever F is adjusted on the column B at its sleeve f to lower the head G upon the upper surface of the package to be branded, when the head is forced against oc the package to burn therein the brand on the plate G<sup>2</sup> by depressing the operating-lever

F. The branding operation having been completed, the head is raised by the lever F to permit the table C to be rotated on releasing it from the lug a³ one-quarter of a revolution to bring into proper position under the branding-head another package to be marked in the manner already described. As a package is branded it is removed from the table and replaced by another to be branded in its 70 turn. Thus the operation of the machine is rendered continuous.

As will be understood, the sleeve f may be set in any raised or lowered position to fix the normal position of the branding-head 75 relative to any one size of package, thereby to set the machine for branding a plurality of packages of that size in succession, and from that set position the counterbalanced suspension of the head adapts it, through the medial way after branding a package and to be forced against the next package to be branded brought underneath it by rotating the table.

What we claim as new, and desire to secure by Letters Patent, is—

1. A branding-machine comprising, in combination, a support for the package to be branded, a column rising from said support, 90 an arm extending from said column, a branding-head suspended from said arm, a sleeve mounted on said column and vertically adjustable thereon, and an operating-lever fulcrumed on said sleeve and connected with 95 said head.

2. A branding-machine comprising, in combination, a base, a table for packages to be branded rotatably mounted on said base and provided with radial grooves, package-centering devices adjustably mounted in said grooves, means for releasably holding the table against rotation at predetermined positions, and a branding-head movably suspended above said table to be raised and low-rosered relative to the packages thereon.

3. A branding-machine comprising, in combination, a base, a column rising therefrom, a table rotatably mounted on said base about said column, an arm extending from said 110 column over the table, a branding-head suspended on a cable movably supported on said arm and carrying a counterbalance, a sleeve adjustably mounted on said column, and an operating-lever fulcrumed to said sleeve and 115 connected with the branding-head.

AUGUST KIEFFER. HENRY REBSAMEN.

In presence of— L. Heislar, J. H. Landes.