F. G. McALPIN.

APPARATUS FOR PRODUCING BURNT WOOD ARTICLES.

APPLICATION FILED APR. 5, 1909.

959,783. Patented May 31, 1910.

2 SHEETS—SHEET 1.

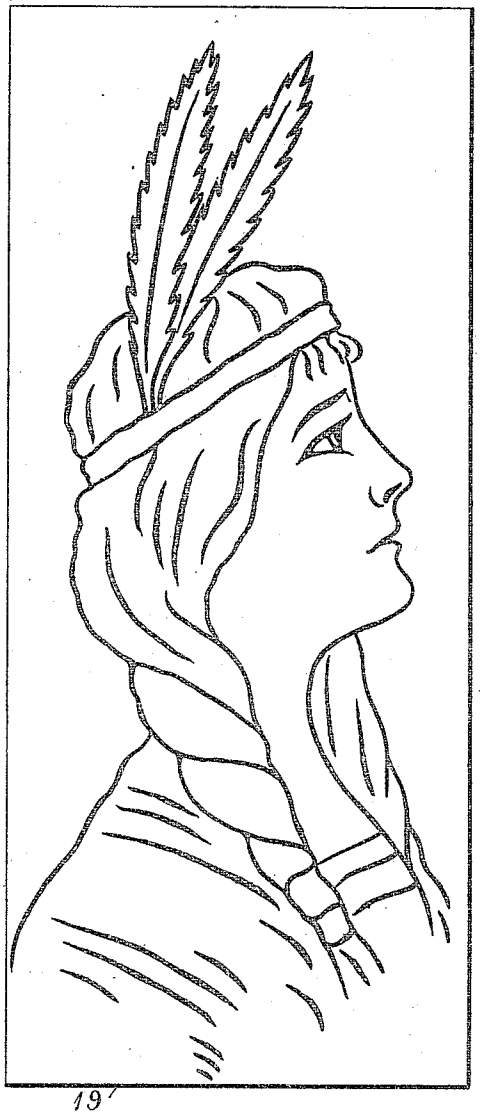

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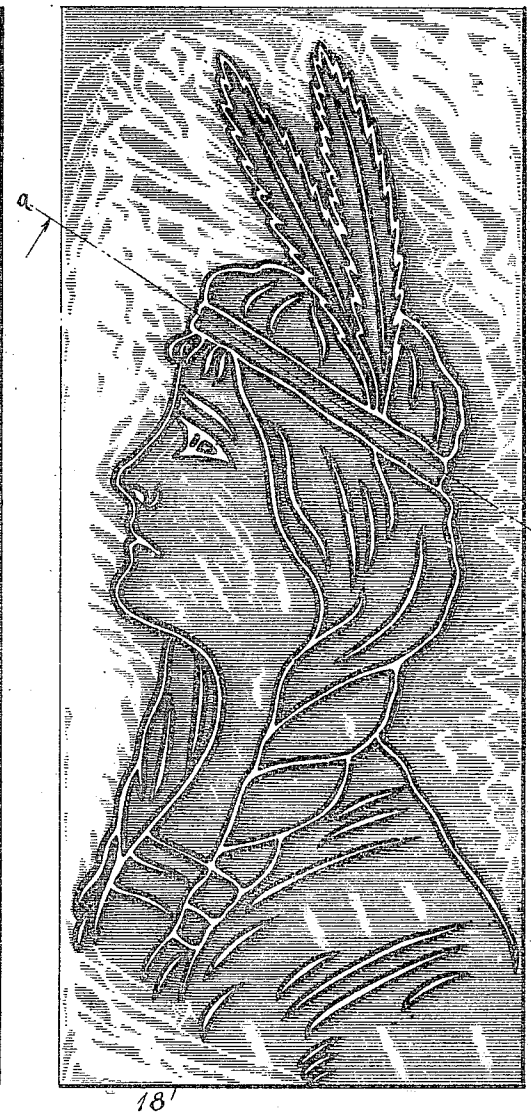
Fig. 1.




18'

Fig. 2.

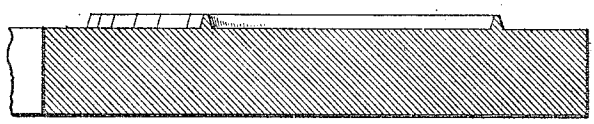


Fig. 3.

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2 SHEETS—SHEET 2.

Fig. 4.

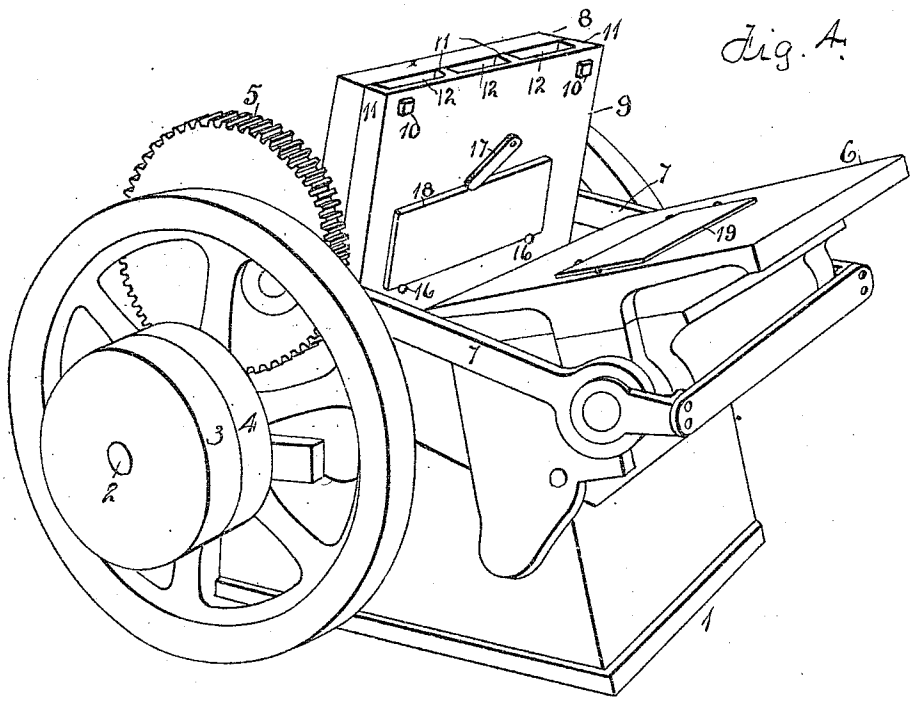



Fig. 5.

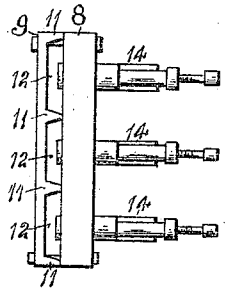
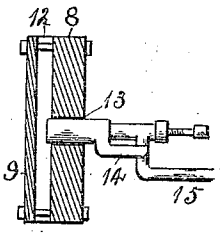



Fig. 6.

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# UNITED STATES PATENT OFFICE.

FRANK G. McALPIN, OF FORRESTON, ILLINOIS.

## APPARATUS FOR PRODUCING BURNT-WOOD ARTICLES.

959,783. Specification of Letters Patent. **Patented May 31, 1910.**

Application filed April 5, 1909. Serial No. 488,151.

*To all whom it may concern:*

Be it known that I, FRANK G. McALPIN, a citizen of the United States, residing at Forreston, in the county of Ogle and State of Illinois, have invented certain new and useful Improvements in Apparatus for Producing Burnt-Wood Articles, of which the following is a specification.

The object of this invention is to mechanically produce burnt wood articles, and consists in the employment of a suitably engraved impression plate to provide a novel arrangement of means by which heat is applied thereto so that a wooden article held against said plate will have the required impression made thereon.

In the accompanying drawings, Figure 1 is a face view of an article produced by my improved mechanism. Fig. 2 is a face representation of the engraved plate for producing said article. Fig. 3 is a section of the engraved plate on dotted line *a a* Fig. 2. Fig. 4 is a perspective view of the press employed in connection with the mechanism. Fig. 5 is a plan view of the stationary bed 8 and plate 9, also the burners 14. Fig. 6 is a vertical section through the bed 8 and plate 9 showing the burner in position.

The press shown in Fig. 4 of the drawings comprises a well known construction to which I have applied my improvements, and consists of the base 1 which supports the shaft 2 carrying the tight and loose pulleys 3 and 4 respectively. The large gears 5 are rotated by a suitable gear connection with the shaft 2. The platen 6 is pivotally connected with the base and is oscillated through the links 7, eccentrically connected with the gears 5 and pivotally connected with the platen.

The stationary bed 8 is supported by the base. To the bed 8 is secured a plate 9 by the bolts 10, and which is held some distance therefrom by the vertically arranged ribs 11 forming vertical flues 12. The bed 8 has horizontal openings 13 through which burners 14 project. A gasolene or gas supply is furnished through the pipes 15 to the burners. These burners project into the vertical flues 12.

On the face of the plate 9 are located studs 16 and a movable finger 17. An impression plate 18 is held in place by the studs 16 and finger 17 and a wooden plaque 19 is held in place on the platen 6 by suitable gages. After the impression plate 18 is suitably heated, the press is set in motion which will move the platen and carry the wooden plaque against the hot impression plate, thereby burning into the wooden plaque the outlines on the impression plate as shown at Fig. 1.

The vertical flues 12 permit the proper draft to the heat furnished by the burners, and said burners being centrally located, as said burners being centrally located, as shown, the flame therefrom will be deflected in opposite directions in the flues, when it strikes the rear wall of the heating plate.

By the employment of my improved apparatus, I am able to produce great numbers of plaques of burnt wood all the same, and the plaques can be used in the make up of boxes, or for wall ornaments.

I claim as my invention.

The combination with a bed having a series of centrally disposed transverse openings therethrough, of a heating plate adapted to receive an impression plate and located in front of the bed in spaced relation thereto and extending across the openings, spacing ribs interposed between the bed and plate and extending between the openings, forming flues with which said openings communicate, and burners disposed transversely to the bed and plate and having their front discharge ends located in the openings and terminating short of the heating plate, said ends directing the heating medium against the rear face of the plate, and said plate causing the heating medium to be deflected in opposite directions in the flues.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

FRANK G. McALPIN.

Witnesses:
M. M. ULFERS,
J. M. MYERS.