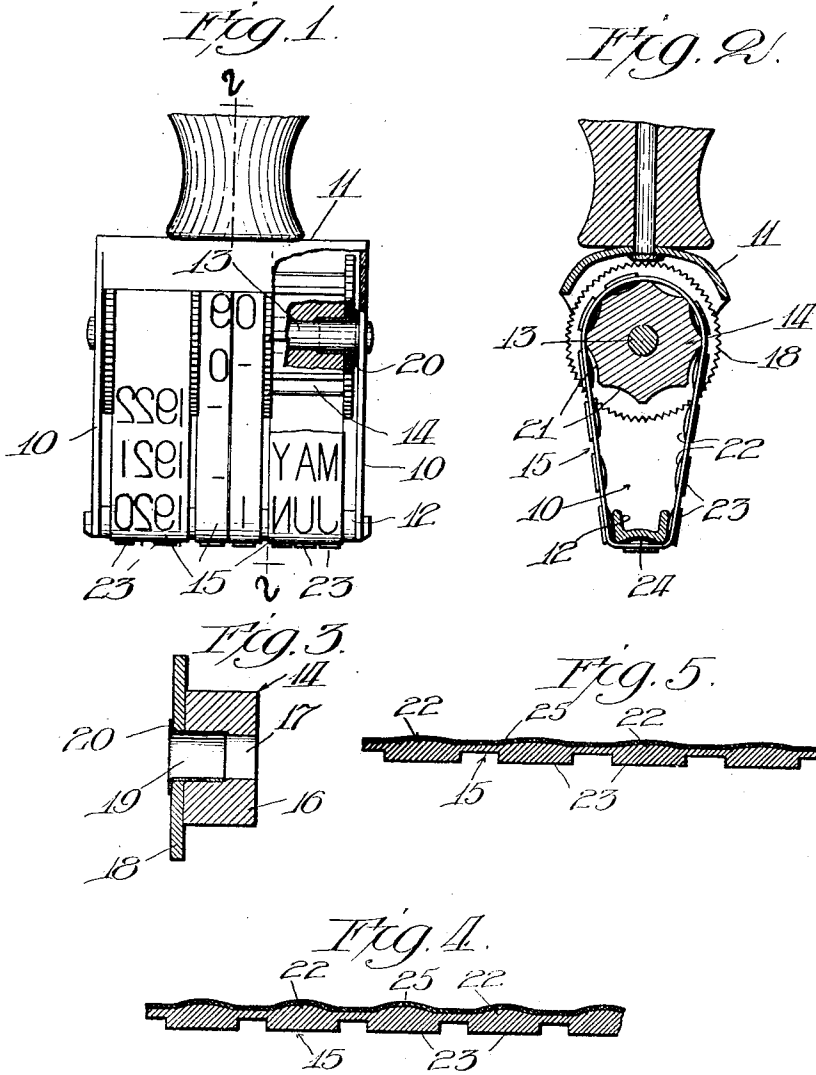


C. S. ELLIS.
BAND DATING STAMP.
APPLICATION FILED JAN. 20, 1919.

1,371,232.

Patented Mar. 15, 1921.



WITNESSES:

Harry S. Gauthier

INVENTOR

Charles S. Ellis
BY *William H. Lee*
ATTORNEY

UNITED STATES PATENT OFFICE.

CHARLES S. ELLIS, OF CHICAGO, ILLINOIS.

BAND DATING-STAMP.

1,371,232.

Specification of Letters Patent. Patented Mar. 15, 1921.

Application filed January 20, 1919. Serial No. 271,948.

To all whom it may concern:

Be it known that I, CHARLES S. ELLIS, a citizen of the United States, and a resident of Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Band Dating-Stamps; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the characters of reference marked thereon, which form a part of this specification.

This invention relates to improvements in dating stamps and like stamps; and refers in part to improvements in band wheels over which the type bands are trained and also to improvements in the type bands themselves.

The invention consists in the combination and arrangement of the parts shown in the drawings and described in the specification and is pointed out in the appended claims.

In the drawings;

Figure 1 is a side elevation of a dating stamp embodying my improvements, with parts in section.

Fig. 2 is a section on the line 2—2 of Fig. 1.

Fig. 3 is an axial section of one of the band wheels.

Fig. 4 is an enlarged fragmentary section of one of the type bands in normal condition.

Fig. 5 is a similar section of the band when stretched.

The dating stamp shown is of a familiar form comprising the side members 10—10, the top member 11, the bridge bar 12 which connects the free ends of the members 10, the shaft 13 on which the band wheels 14 are mounted to rotate and type bands 15 which are trained about said type wheels and bridge bar.

The type wheels comprise drums 16 that are formed with axial bores 17 through which the shaft 13 extends, and operating flanges 18 fitted to the ends of the drums and having openings in alinement with the drum bores. Said flanges are peripherally roughened for engagement by the finger and thumb to turn the band wheels. The flanges are made parts separate from the drums, and are fixedly attached thereto by means constituting one phase of said invention.

Each of said drums is preferably made of wood, a relatively soft wood being recom-

mended, and the flange 18 may be made of any rigid, durable material, such as indurated fiber. The flange is fixed to the drum by a metal flanged sleeve 19 of less length than said bore and of an exterior diameter greater than the interior diameter of said bore. Said sleeve thus fits tightly within the bore of the drum; deforming or compressing the wall of the bore so as to prevent relative rotation of the parts, and extends such distance toward the center of said bore as to furnish a good anchor for the sleeve. The outer end of the sleeve body extends through the opening of the flange and is riveted or upset at 20 over the outer face of the flange. Before the flange is fitted to the drum, glue may be applied to the end face thereof to insure, when hardened, against turning of the flange relatively to the drum in the event the tubular body of the sleeve should not fit sufficiently tight in the drum and flange bores or should not be otherwise shaped to prevent relative rotation of the flange and drum. The said flanged sleeves constitute means to fix the flanges and drums rigidly together and also constitute metal bearings for the type wheels for contact with the shaft 13.

As herein shown, the drums are longitudinally fluted to produce external depressions 21 to receive transverse convex projections 22 at the inner sides of the bands, said projections being located severally in line with the type blocks or projections 23, the construction being similar to that shown in my prior United States Letters Patent Number 1,069,868, dated August 12, 1913. In this form of stamp the bridge bar 12 is shaped to provide on its under side a longitudinal recess 24 to receive the projections 22 so that thereby the bands are held at the printing line from shifting.

The construction described produces a very simple and efficient type wheel which can be made at small cost, and by means which insures that the band bearing face thereof will always be true to hold the type band and its type properly alined in the assembly and thereby insure balanced traction of the wheel drum against the type bands to thereby effect accurate shifting of the type bands and to assist in holding the bands with their type properly alined at the printing line.

In accordance with another phase of the

invention, the inner sides of the type bands are formed by strips 25 which are applied over and vulcanized to the inner roughened faces of the rubber portions of the type bands. The said strips 25 are in themselves inextensible and are made slightly longer than the rubber portions of the bands at the longitudinal axis thereof so as to lie along the inner faces of the bands and to be adhered (as vulcanized) thereto in what may be termed a slack condition so that the composite bands, composed of the elastic body portions and the inextensible backing strips 25 are capable of slight elongation, which elongation is limited by the backing strips. The purpose of so making the composite bands is to permit them to stretch sufficiently (as shown in Fig. 5) to allow the rounded projections at the inner sides of the bands to pass freely over the higher portions of the recessed bridge bar 12 when the bands are adjusted or shifted from one position to the other. The backing strips, however, prevent undue elongation of the bands. Said strips, if desired, may be otherwise incorporated into the bands so as to permit the desired limited elongation.

I claim as my invention:

1. In a band printing stamp, a type band wheel comprising a drum of deformable material, having an axial bore, an operating flange having an opening alined with the drum bore, and a metal sleeve of less length than said bore and fitting tightly therein to compress or deform the wall of the bore, said sleeve extending through said flange and

into the drum and upset at one end over said flange.

2. A band dating stamp comprising a frame having a recessed type supporting member at the printing line, a plurality of band wheels rotatably mounted in the frame which are peripherally fluted, and type bands trained about said wheels and said type supporting member and provided with traction projections to engage said flutes and said recess, each said bands comprising a continuous elastic body on which said projections are formed and an inextensible backing strip applied to the back of the band over said projections with a normal slackness to form a continuous wear strip, while permitting the elastic projections to yield as they are drawn into and out of said recessed member.

3. A type band for printing stamps comprising an elastic body provided with spaced, transverse traction projections, and an inextensible backing strip applied and adhered to the back of said body with a normal slackness.

4. A type band for printing stamps composed of a rubber body having longitudinally spaced, transverse traction projections, and an inextensible backing fabric applied over the back of said body with a normal slackness.

In testimony whereof I claim the foregoing as my invention, I hereunto append my signature at Chicago, Illinois, this 13th day of January, 1919.

CHARLES S. ELLIS.