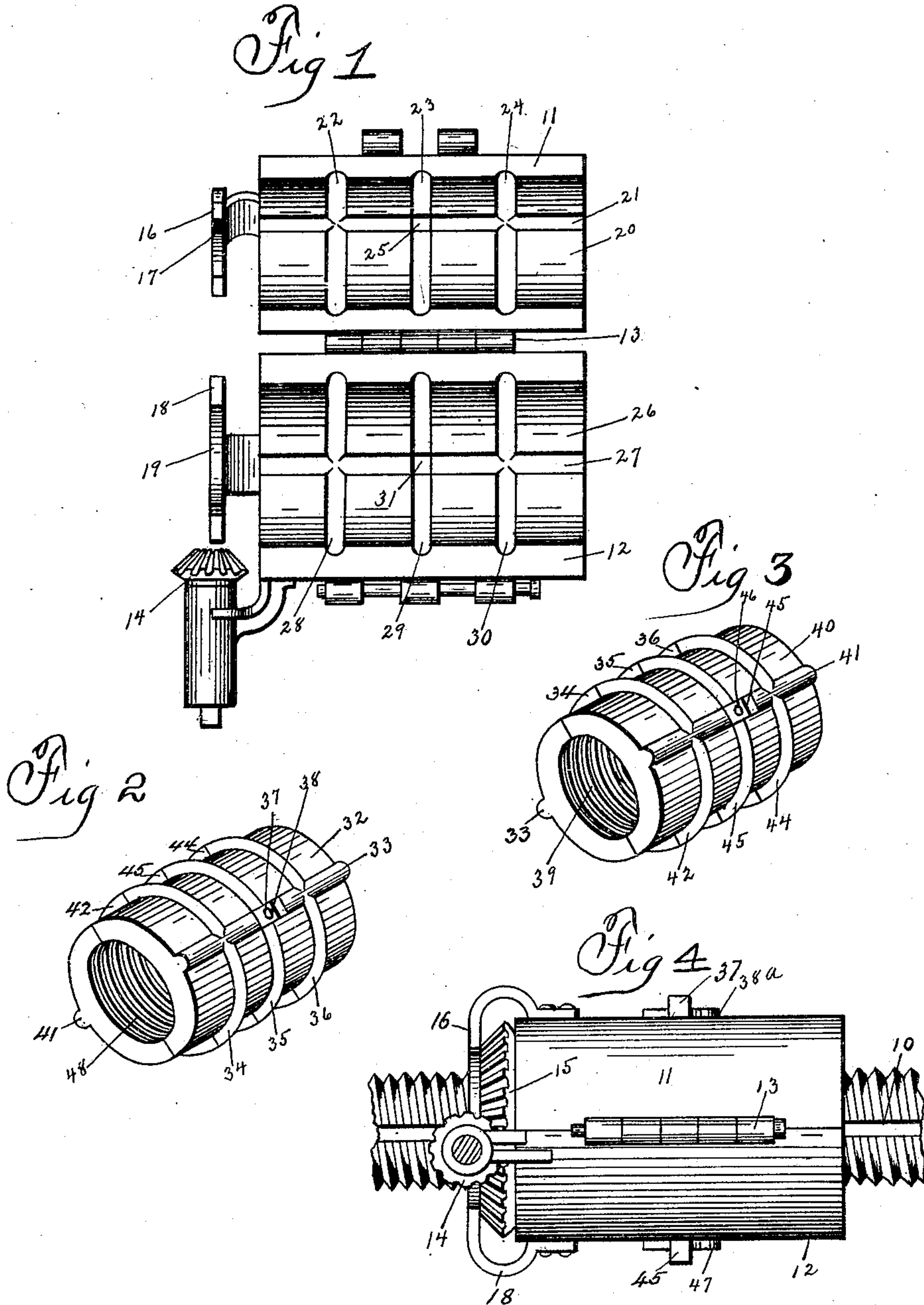


G. T. WHITE.  
DIVIDED DRILL FEEDING BOX.  
APPLICATION FILED AUG. 11, 1902.



Witnesses:  
Frank Tate  
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# UNITED STATES PATENT OFFICE.

GEORGE T. WHITE, OF COLFAX, IOWA.

## DIVIDED DRILL FEEDING-BOX.

SPECIFICATION forming part of Letters Patent No. 790,990, dated May 30, 1905.

Application filed August 11, 1902. Serial No. 119,217.

*To all whom it may concern:*

Be it known that I, GEORGE T. WHITE, a citizen of the United States, residing in Colfax, in the county of Jasper, and in the State of Iowa, have invented a new and useful Improvement in Divided Drill Feeding-Boxes, of which the following is a specification.

The object of my invention is to provide a divided boxing for a drilling-machine and a simple, strong, durable, and inexpensive means of rigidly securing interchangeable linings thereto.

My invention consists of certain details of construction hereinafter set forth, pointed out in my claim, and illustrated in the accompanying drawings, in which—

Figure 1 shows a front elevation of the box I employ, the upper and lower portions being shown in an open position from the hinges. Figs. 2 and 3 show detailed views of the interchangeable linings I employ; and Fig. 4 shows a front elevation of the feeding-box and a portion of the thread-bar, the various parts being assembled and the upper and lower portions of the box being secured together.

Referring to the accompanying drawings, the reference-numeral 10 is used to indicate a thread-bar, and the numerals 11 and 12 the upper and lower portions, respectively, of the divided box I employ, the two parts being hinged at 13.

The numeral 14 indicates a drive-wheel of my gearing mounted on the boxing, and 15 indicates the driven wheel mounted in the usual way on the thread-bar.

The numeral 16 indicates a hook mounted on the upper portion 11 of the boxing, curving upwardly and projecting forward and designed to receive a hook as a bearing for the driven wheel 15, having its forward end hollowed at 17, so as to be adapted to fit curve of the shank on the forward face of the driven wheel. The numeral 18 indicates a like hook for a like purpose mounted on the lower portion 12 of the boxing projecting downwardly and forwardly, having its forward end hollowed at 19, so as to be adapted to fit the curve of the shank on the forward face of the driven wheel.

The numeral 20 indicates the inner surface

of the upper portion 11 of the boxing, being traversed longitudinally in its central portion by a slot 21.

The numerals 22, 23, and 24 indicate slots in the inner surface of the boxing 11 at right angles to slot 21, said slots being evenly spaced and arranged and designed so that the central slot 23 crosses the longitudinal slot 21 in the center of the inner surface of the boxing.

The numeral 25 indicates an opening through the center of the boxing designed to receive a lug mounted on the interchangeable lining.

The numeral 26 indicates the inner surface of the lower portion 12 of the boxing, being traversed longitudinally in its central portion by a slot 27.

The numerals 28, 29, and 30 indicate slots in the inner surface of the boxing 12 at right angles to slot 27, said slots being evenly spaced and arranged.

The numeral 31 indicates an opening through the center of the boxing designed to receive a lug mounted on the interchangeable lining.

The numeral 32 indicates the upper surface of the interchangeable lining designed to be received by the upper portion 11 of the boxing.

The numeral 33 indicates a raised portion extending longitudinally along its center and designed to be received by the slot 21 when the lining is secured to the boxing.

The numerals 34, 35, and 36 indicate raised portions extending transversely across the outer surface of the lining at right angles to the raised portion 33 and designed to be received by the slots 22, 23, and 24, respectively, when the lining is secured to the boxing.

The numeral 37 indicates a lug in the center of the outer surface of the lining designed to be received by and projected through the opening 25 in the boxing, and the numeral 38 indicates an opening extending transversely through said lug. In securing the interchangeable lining to the boxing the lug 37 is projected through the opening 25, and a retaining-pin 38<sup>a</sup> is projected through the opening 38 in the lug.

The numeral 39 indicates the inner surface



of the interchangeable lining, being threaded along its entire length and designed to receive and engage the thread-bar 10.

5 The numeral 40 indicates the outer surface of the interchangeable lining, designed to be received by the lower portion 12 of the boxing.

The numeral 41 indicates a longitudinally-extended raised portion, and the numerals 42, 43, and 44 indicate cross-raised portions, the  
10 numeral 45 the lug, and 46 the transverse opening through the lug, and 47 the retaining-pin, all being exactly similar to the raised portions and lug on the lining 32.

15 The numeral 48 indicates the inner surface of the lining, being threaded along its entire length and designed to receive and engage the thread-bar 10.

The advantage of using interchangeable linings such as I employ is readily seen, as the  
20 continual grind of the thread-bar through the boxing will wear away the threads of the box, thus necessitating replacement, and it is obvious if the lining is integral with the boxing a whole new box will be necessary. By  
25 using interchangeable linings all that will be necessary will be to replace the old linings by new ones, and thus obviously the expense and time in changing these are greatly reduced.

Another important feature of my invention  
30 is that I use two hooks 16 and 18 as bearings for the driven wheel mounted on the thread-bar, and these hooks being concaved in their forward faces extend very nearly around the shank of the driven wheel. This, it is obvi-  
35 ous, will eliminate to a great extent displacement of the driven wheel.

Having thus described my invention, what

I claim, and desire to secure by Letters Patent of the United States, is—

In a divided drill feeding-box, the combina- 40  
tion of an upper and lower section hinged together, each section being traversed on its inner surface by one longitudinal slot and three cross-slots, an opening located centrally in  
45 each section and extending from the outer to the inner surfaces thereof; removable linings screw-threaded along their inner surfaces and provided on their outer surfaces with one longitudinal ridge and three cross-ridges, said  
50 linings being designed to fit within the said upper and lower sections, the ridges being designed to engage the slots; a lug mounted centrally on the outer surface of each of said linings and designed to project through the open-  
55 ings in the sections; a channel transversely through each of said lugs; a retaining-pin designed to pass through each of the openings in the lugs and to form a means of securing the linings to the sections; retain-  
60 ing-hooks secured to the forward end of each of the sections, said hooks extending outwardly and curving forwardly from the said sections, the two hooks being designed to engage the outer surface of a driven wheel mounted on a  
65 threaded bar passing through the removable linings and to retain said driven wheel in a permanent position with respect to the boxing, all arranged and combined substantially as and for the purposes stated.

GEORGE T. WHITE.

Witnesses:

BLANCHE SEDGWICK,  
FRANK STEINER.