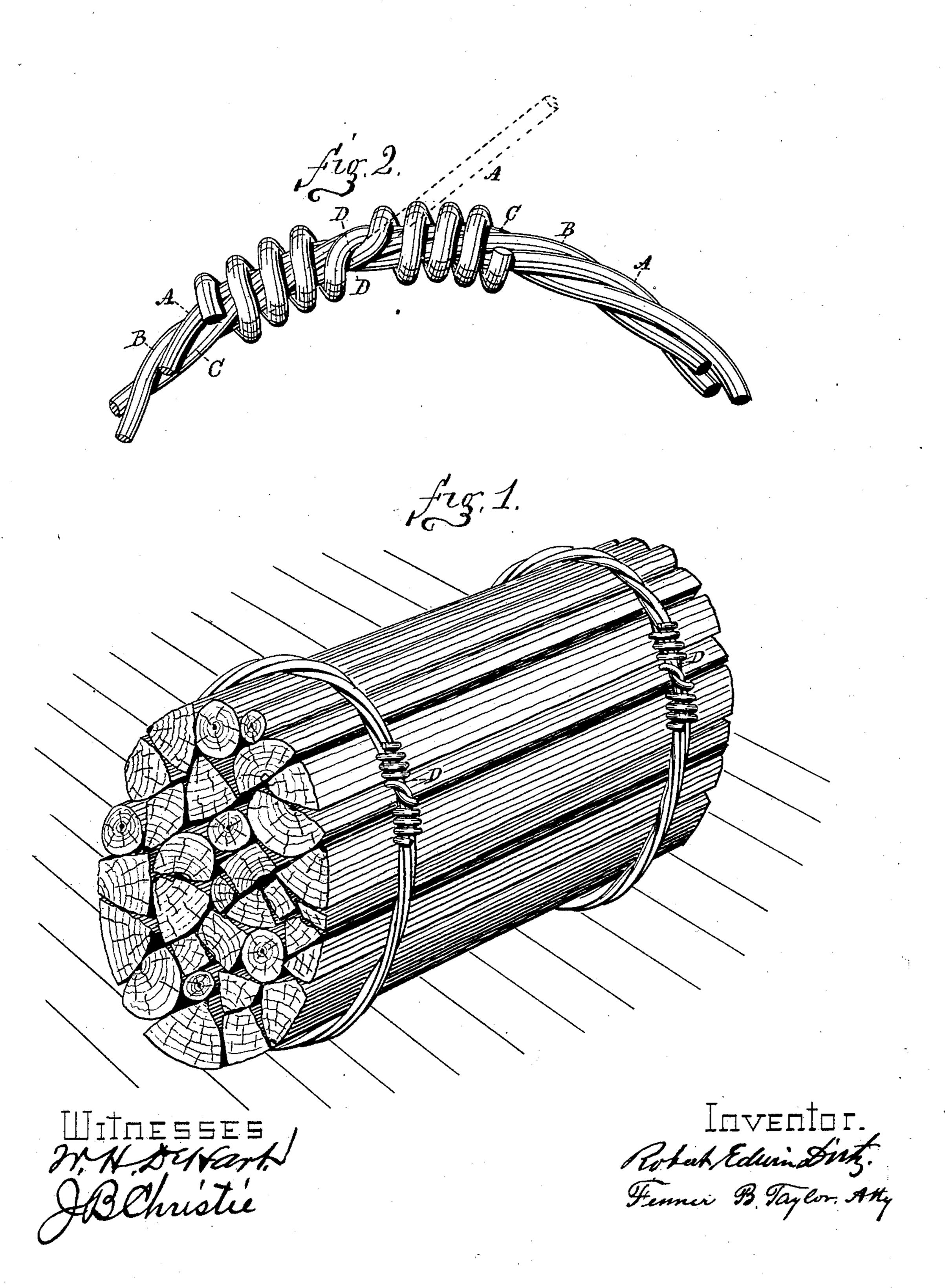
## R. E. DIETZ

BALE FOR BALING WOOD FOR TRANSPORTATION.

No. 362,148.

Patented May 3, 1887.



## United States Patent Office.

ROBERT EDWIN DIETZ, OF NEW YORK, N. Y.

## BALE FOR BALING WOOD FOR TRANSPORTATION.

SPECIFICATION forming part of Letters Patent No. 362,148, dated May 3, 1887.

Application filed April 15, 1886. Serial No. 198,962. (Model.)

To all whom it may concern:

Be it known that I, ROBERT EDWIN DIETZ, of New York city, in the county and State of New York, have invented certain new and suseful Improvements in Bales for Baling Wood for Transportation, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, and to the letters of reference marked to thereon.

My invention has relation to the preparation of wood for transportation, and particularly to the construction of metallic bands or hoops employed in that preparation.

The objects of my invention are to produce a flexible, inexpensive, and durable hoop or band which can be easily made without the employment of skilled labor, and which can be used continuously without rapid deterioration.

My improvements involve certain new and useful peculiarities of construction or arrangements of parts of the loop or band, as will be herein first fully described, and then pointed out in the claim.

In the accompanying drawings, forming part of this specification, Figure 1 is a perspective view of a bundle or package of wood having encircling flexible hoops or bands constructed and applied in accordance with my invention. Fig. 2 is a similar view showing a fragment of one of the bands, and indicating its peculiar construction and mode of locking the extremities.

In both figures like letters of reference, wherever they occur, indicate corresponding parts.

The flexible hoops or bands are made each of a single piece of wire by first bending one 40 end of the wire, as at A, into a circle or coil of the required diameter. Then a second coil, B, is formed by winding the free end of the wire spirally around the first coil, and for a triple-strand hoop it is wound again 45 around the two strands or coils, all as plainly indicated in the drawings. The same method is followed with other strands or coils, according to the number of wires required for the requisite diameter and strength of the go band. The extremities of the wire are then locked by bending them short across each other and winding them closely around the coils for a suitable distance, the winding and coiling of the extremities continuing in

the same direction as the previous long wind- 55 ings and coilings. This manner of securing the ends obviates any tendency of the wire to break, as might arise from bending the ends abruptly and back upon each other. The hoop or band so formed is capable of being 60 easily and quickly made by any person, and its formation is such as to secure the maximum strength for the weight of wire employed, being in the nature of an endless twisted wire cable. It is sufficiently flexible, 65 so that it will conform closely to the exterior of the bundle to which it is to be applied, and it may be used over and over again. The wood to be formed into bundles or packages may be of any convenient length or size, such 7c. as is usually sold in the market, generally varying from eighteen inches to four feet in length, and I preferably make the bundles from twenty-four to thirty inches in diameter, firmly securing the same by two or more 75 of the improved flexible bands or hoops, as indicated in Fig. 1. The bundle is first roughly or loosely made up by setting the pieces of wood in the bands and then completed by driving a piece centrally in each 80 end of the bundle. These driven pieces expand the mass until it is firmly held or bound by the hoops or bands, as will be readily understood.

The improved bands could not be formed 85 on the bundle, as is the case with the ordinary single-tie wire, and they cannot be removed from the bundle except by cutting or first loosening the sticks. The sticks are in practice loosened, and this by first removing 90 the central driven pieces above referred to, and then all are withdrawn from the bands, leaving the latter intact and ready for future application.

What I claim as new herein, and desire to 95 secure by Letters Patent, is—

The herein-described flexible hoop or band, formed of a wire spirally wound in two or more coils or strands, and having the extremities of the wire secured by crossing and wind- 100 ing about the several strands, substantially as shown and described.

In testimony whereof I affix my signature in presence of two witnesses.

ROBERT EDWIN DIETZ.

Witnesses:

W. H. DE HART, J. B. CHRISTIE.