J. KELLEY.

CABLE CLAMP.

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1,298,052. Patented Mar. 25, 1919.

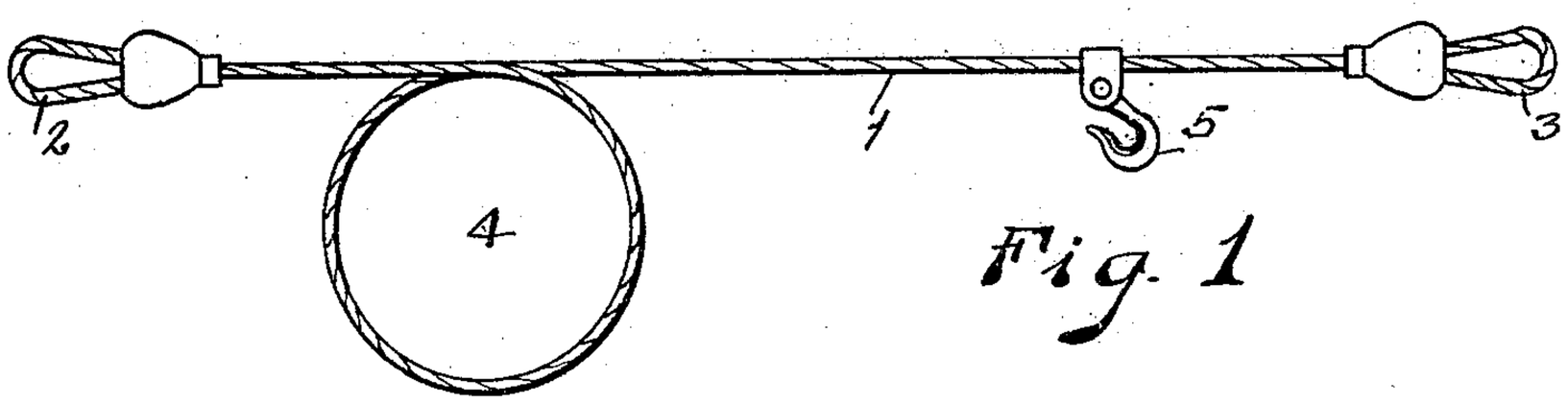

Fig. 1

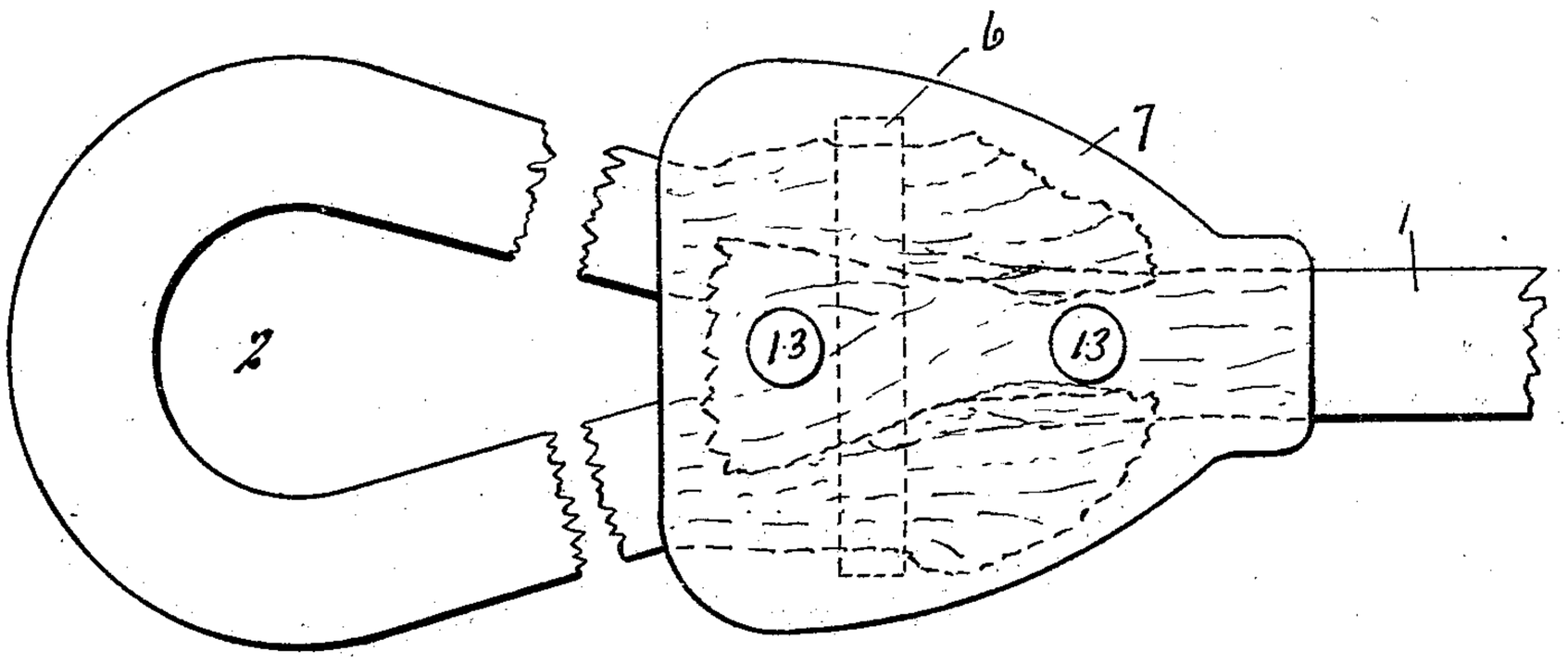

Fig. 2

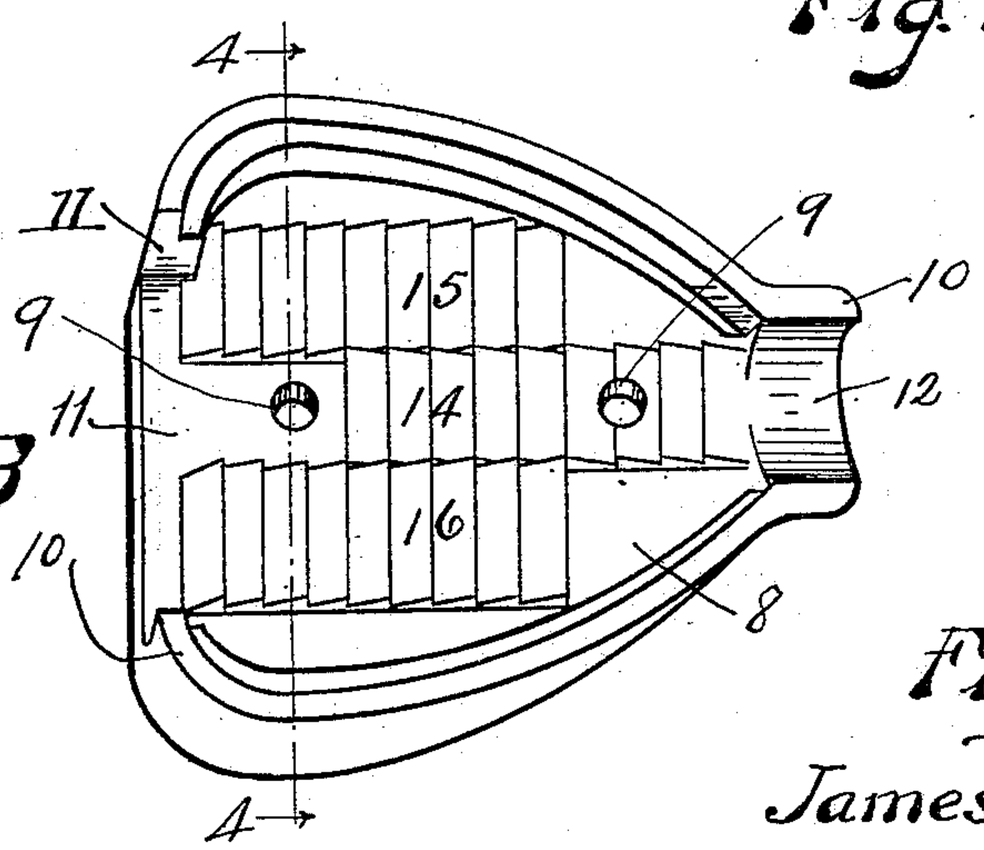

Fig 3

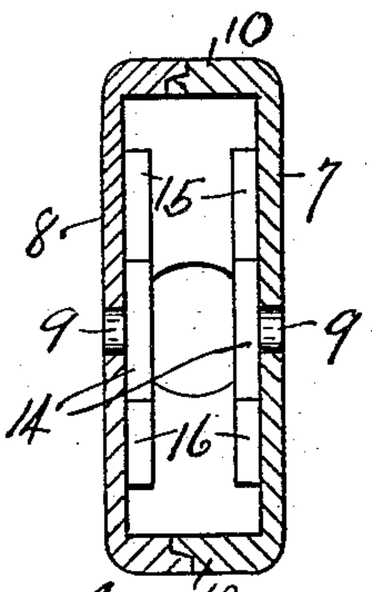

Fig. 4

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UNITED STATES PATENT OFFICE.

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CABLE-CLAMP.

1,298,052. Specification of Letters Patent. Patented Mar. 25, 1919.

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To all whom it may concern:

Be it known that I, JAMES KELLEY, a citizen of the United States, residing at Clarkia, in the county of Shoshone and State of Idaho, have invented certain new and useful Improvements in Cable-Clamps, of which the following is a specification.

The present invention relates to improvements in cable clamps adapted especially for use in securing loops at the ends of draft cables. The present device is particularly adapted for what are commonly termed choke-lines, which are used by operators in getting out timber, such as saw logs, and these choke-lines are employed for the purpose of dragging or lifting the logs to the cars in loading. Each choke-line is provided with loops at its ends, and the breaks, which frequently occur, are mainly at the splice joint of these loops, which are usually made from the cable itself. Inasmuch as the steel cables are expensive, considerable loss is incurred when the cable becomes worthless because of the breaking therefrom of the loop, because the remainder of the cable is of insufficient length to permit reforming a loop at the end of the cable, and in many instances the cable length is a total loss.

The object of the present invention is to provide a clamping device by means of which loops of separate material, as for instance cables from which the integral loops have been broken, may be firmly and securely attached to the cable length after the integral loop has been broken therefrom, thus saving the cost of the cable, and also providing an efficient device for clamping the cable portions to form the loop.

In the accompanying drawings one complete example of the physical embodiment of the invention is illustrated, constructed and arranged according to the best mode so far devised, for the practical application of the principles of the invention.

Figure 1 is a view showing a choke-line as used in logging operations, a loop being shown in the body of the steel cable, which fits about the log.

Fig. 2 is an enlarged plan view showing the end of a cable with the loop broken and the clamp in position.

Fig. 3 is a perspective view, looking at the inner face of one of the clamp plates that form the clamping device.

Fig. 4 is a transverse vertical sectional view at line 4, 4, of Fig. 3.

In order that the preferred form of the invention may be readily understood I have illustrated a complete choke-line comprising the steel-cable 1, the end loops 2, and 3, and formed with a body loop or twist 4 indicating the manner of attaching to a log, while 5 is a slidable hook on the cable for making fast the cable in usual manner.

The essential part of the invention resides in the means of attaching the loops 2 and 3 to the cable 1 and as the clamping devices are duplicates, a description of one device will suffice for both.

In forming the loop 2 a suitable piece of steel cable is employed, of the proper size, and its ends are preferably frayed or its strands separated and the end flattened, as indicated in dotted lines Fig. 2. The end of the cable to which the loop is to be attached is also frayed by having its strands separated and the end flattened out, and then a metal band 6 is fastened, by hammering, about the three ends to hold them securely together in a flattened position.

The cable and loop are now ready to receive the clamping plates indicated as a whole by the numerals 7 and 8, which plates are duplicates and provided with alined openings 9, 9, and side flanges 10, 10, there being a recess 11 in each plate at that portion which becomes the outer end of the plate. These recesses are formed in the flanges, and together provide an opening for the ends of the loop. At the inner end of the clamp plates they are formed with semi-cylindrical sleeves 12 which project beyond the outline of the plates, which, in general shape resemble a heart. The two plates are of course complementary and when placed together as indicated, they form a casing for inclosing the three ends of the cable and loop, and by means of rivets 13 passed through the alined holes 9 the plates are securely clamped over the cable and loop, with the sleeve portions 10 embracing the cable, and the opening formed by the recesses 10 accommodating the loop ends as they converge in the casing. Upon their inner faces, each clamp plate is provided with a series of parallel rows of teeth, the teeth of the central row 14 biting in one direction and the teeth of the two outer rows 15 and 16 biting in the opposite direction, so that when

the two plates are brought into clamped relation to the frayed ends of the cable and loop these teeth bite into the strands of the three ends to hold them against strains that would tend to pull them out of the casing. To further hold the parts together molten metal, as Babbitt metal is poured into the casing formed by the complementary plates, and as the metal penetrates into the cavities and spaces around the strands and teeth, it will readily be seen that, after the metal has hardened, the three ends of the cable and loop are firmly and rigidly set and fastened within the two clamp plates to form an efficient fastening or splice for the loop.

Claims:

1. The combination with the cable end and loop ends frayed, and a band encircling these ends, of a pair of complementary clamp plates having flanges to form an inclosing casing for the three ends, and rivets passed through the plates for clamping the ends as described.

2. The combination with a cable and loop ends, of a pair of complementary plates each provided with parallel rows of biting teeth and the teeth in the rows biting in opposite directions, said plates having flanges to constitute an inclosing casing, rivets securing the plates together, and cast metal within the casing embedding the cable and loop ends and said biting teeth.

In testimony whereof I affix my signature.

JAMES KELLEY.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."