J. DUGGAN.

TOW LINE.

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1,386,052.

Patented Aug. 2, 1921.

Fig. 1.

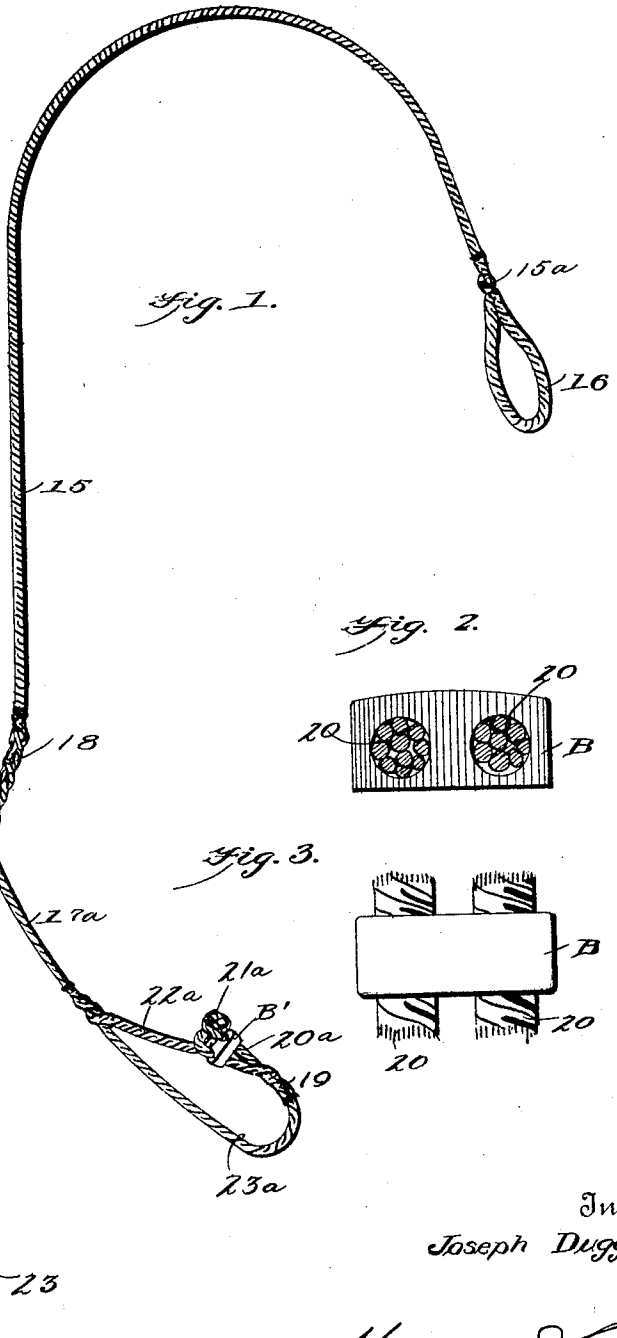



Fig. 2.




Fig. 3.




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# UNITED STATES PATENT OFFICE.

JOSEPH DUGGAN, OF DETROIT, MICHIGAN.

## TOW-LINE.

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Application filed April 15, 1920. Serial No. 374,111.

*To all whom it may concern:*

Be it known that I, JOSEPH DUGGAN, a citizen of the United States, and a resident of Detroit, in the county of Wayne and State of Michigan, have invented certain new and useful Improvements in Tow-Lines, of which the following is a specification.

My invention relates to tow lines particularly adapted, although not necessarily, for use in hauling stalled motor cars, a purpose of my invention being the provision of a tow line of simple and efficient construction which can be readily attached to and detached from the vehicle to be towed.

I will describe one form of tow line embodying my invention and will then point out the novel features thereof in claims.

In the accompanying drawings:

Figure 1 is a view showing one form of tow line embodying my invention.

Fig. 2 is an enlarged detail view showing in side elevation one of the locking blocks shown in Fig. 1 and the manner in which the stretches of cable are trained therethrough.

Fig. 3 is a view similar to Fig. 2 showing the block in top plan view.

Referring specifically to the drawings, in which similar reference characters refer to similar parts, 15 designates a main section of rope or cable one end of which is bent upon itself and secured to the rope by splicing as indicated at 15ª whereby, an eye or loop 16 is provided. The opposite end of the rope 15 is provided with branch sections 17 and 17ª which are permanently connected thereto and at corresponding points by means of splicing as indicated at 18. The free ends of the sections 17 and 17ª are bent upon themselves and secured by splicing as at 19 to provide eyes 20 or 20ª. Each eye 20 or 20ª is adapted to receive the knotted end 21 or 21ª of rope 22 or 22ª and to thereby cause the latter to coact with the sections 17 and 17ª in providing relatively large loops or eyes 23 or 23ª. The knotted ends 21 or 21ª are adapted to be locked within eyes 20 or 20ª by means of locking blocks B and B′ which as shown in Figs. 2 and 3 are provided with circular openings to receive the stretches of the loops 20 and 20ª. The openings of the blocks B and B′ are of sufficient size so as to permit the sliding of the blocks on the rope and to thereby constrict the enlarged eyes 20 and 20ª in effecting a locking or releasing of the knotted ends 21 and 21ª. It is to be understood that the blocks B and B′ are applied to the rope sections 17 and 17ª prior to the formation of the eyes 20 and 20ª so that after the splicing 19 has been effected the blocks are permanently retained on the rope sections.

In the practical application of the tow line, the eye 16 is adapted to be connected to a suitable part of the towing vehicle, the eyes 23 and 23ª embracing the front axle of the vehicle to be towed. It will be understood that before this operation can be effected the knotted ends of the rope sections 22 and 22ª are removed from the eyes 20 and 20ª by sliding the blocks B and B′ rearwardly upon the rope. After the rope sections 17 and 22 have been trained about the axle, the knotted ends are then inserted into the eyes and the blocks pushed forwardly so as to engage the knots and thereby effectively lock the two sections in eye formation.

Although I have herein shown and described only one form of tow line embodying my invention, it is to be understood that various changes and modifications may be made herein without departing from the spirit of the invention and the spirit and scope of the appended claims.

What I claim is:—

1. A tow line comprising, a main section, and branch sections connected to one end of the main section, and having their free ends formed with eyes, relatively short sections connected to the branch sections and having knotted ends adapted to extend through the eyes of the branch sections, and locking blocks slidably fitted on the eyes of the branch sections for locking the knotted ends of the short sections within the eyes.

2. A tow line comprising, a main section, branch sections connected to the main section and having their free ends bent upon themselves and spliced to form eyes, relatively short sections spliced to the branch sections at points intermediate their ends, the short sections having their free ends formed with knots, and means on the branch sections operable to effect a constriction of said eyes for locking the knotted ends of the short sections therein.

JOSEPH DUGGAN.