

J. G. OWEN.
SWIVEL.
APPLICATION FILED FEB. 19, 1906.

935,627.

Patented Sept. 28, 1909.

FIG. 1.

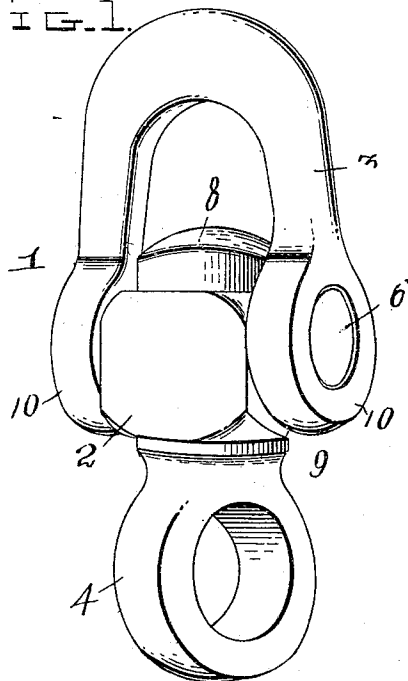


FIG. 2.

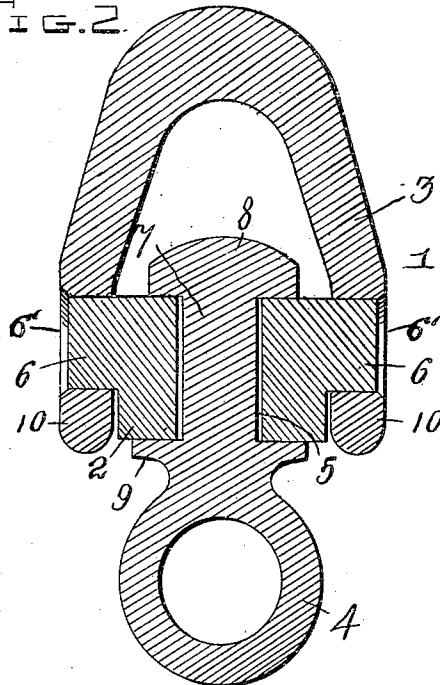


FIG. 3.

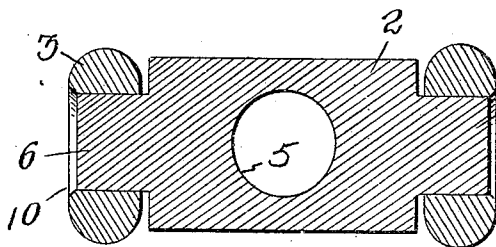


FIG. 5.

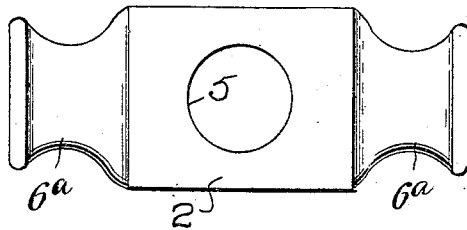


FIG. 4.

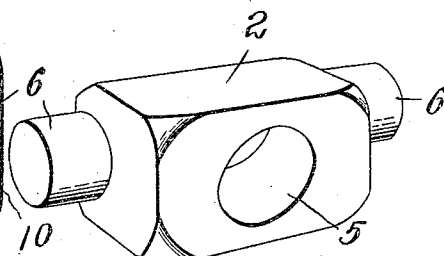
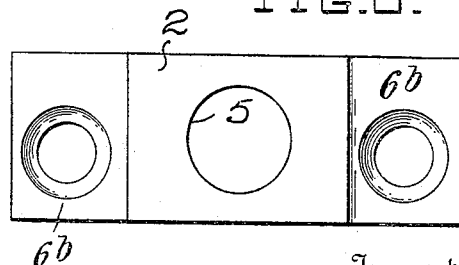


FIG. 6.



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SWIVEL.

935,627.

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To all whom it may concern:

Be it known that I, JAMES G. OWEN, a citizen of the United States, residing at Portland, in the county of Multnomah and State of Oregon, have invented certain new and useful Improvements in Swivels; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to improvements in swivels for use in logging chains or cables and for other purposes.

The object of the invention is to provide a simple, inexpensive, strong and durable swivel coupler having pivots in two right-angularly disposed planes whereby it may adapt itself to curved or irregularly shaped surfaces over which it passes so as to reduce the danger of breakage to a minimum.

With the above and other objects in view, the invention consists of certain novel features of construction, combination and arrangement of parts, as will be more fully described and particularly pointed out in the appended claim.

In the accompanying drawings:—Figure 1 is a transverse view of my improved swivel or swivel coupler; Fig. 2 is a longitudinal sectional view through the same; Fig. 3 is a transverse section. Fig. 4 is a perspective view of the swivel block or bridge piece; Figs. 5 and 6 are views of slightly modified forms of swivel blocks.

Referring to the drawings by numeral, 1 denotes my improved logging swivel which comprises a swivel block or bridge piece 2 having pivotally or hingedly connected thereto a clevis or shackle 3 and having swiveled or rotatably mounted therein a bolt 4 formed with an eye, hook or engaging device, the axes of the bolt and the clevis being in planes at right-angles to each other. The block 2, as clearly shown in Fig. 4 of the drawings, is substantially rectangular in form, and is formed with a centrally disposed circular bore or opening 5 and on opposite sides with alining cylindrical lugs or trunnions 6. The opening 5 is adapted to receive the stem 7 of the eye-bolt 4, which stem is upset or headed, as shown at 8, after it has been placed in the opening 5, so as to retain the bolt therein and at the same time permit it to rotate or turn freely. The head 8 and an annular flange or shoulder 9 formed

on the eye-bolt 4 prevent the latter from moving longitudinally in the opening 5 in the block. The clevis or yoke 3 which is preferably of U-form has the ends of its arms formed with eyes 10 to engage the trunnions or journals 6 of the block, said eyes 10, being countersunk or flaring as shown at 6', in Fig. 2, to permit of the trunnions 6, of the block having lateral play in said eyes, and serve to prevent the stem of the bolt from binding in the opening 5 of the block as said opening is constructed of a diameter larger than that of the stem so as to space the stem from the opening and by this means the trunnions are permitted to have lateral play in said eyes of the yoke.

In Fig. 5 of the drawings I have shown the lugs or trunnions 6^a of concave form, that is, with the middle of less diameter than the end, so that the clevis 3 is attached by bending the ends of its arms around said lugs and then welding them to form the eyes 10.

In Fig. 6 of the drawings, I have shown the block formed with apertured lugs 6^b through the openings in which the clevis eyes pass as will be readily understood.

The side members 3^a of the clevis 3 are inclined inwardly, narrowing the space between the same outward from the axis of the clevis. This feature is important and coöperates with the eccentric location of the trunnions 6, for while the clevis may move freely on its axis within certain degrees in the upper segment of the circle described from its radius, when passing said points the inner faces of the clevis members 3^a, immediately above the eyes thereof, will bind with the end-face portions 2^a of the block or cross-head, 2, on either side of the trunnion 6, and restrain the clevis 3 from dropping down any lower; and in so doing preventing the clevis interfering with the eye-bolt 4, also preventing the cable strands, attached to the clevis and the eye-bolt 4, from interfering or buckling. On the other hand, no matter how tightly the clevis 3 is forced down upon the ends of the cross-head, 2, it will be easily disengaged the moment a pull is exerted on the clevis.

The construction, use and advantages of the invention will be readily understood from the foregoing description taken in connection with the accompanying drawings. It will be seen that owing to the flexibility

of the device it will adjust or adapt itself to uneven or curved surfaces, so that there will be little or no liability of its breaking or of breaking or injuring the chain or cable
5 attached to it. It will be noted that it is particularly well adapted for removing or hauling logs from place to place, and that it may be used equally as well for anchor chains and for various other purposes.

10 Having thus described my invention, what I claim as new and desire to secure by Letters Patent, is:—

In a clevis, the combination of a block or cross-head provided with trunnions at its
15 ends, said trunnions located eccentrically

near the upper face of said cross-head, a swiveling member in said cross-head, and a clevis hinged on said trunnions, the side members of said clevis having an inclination inwardly, narrowing the space between
20 said members outward from the axis of the clevis, and limiting the lateral movement of the latter on its axis.

In testimony whereof I have hereunto set my hand in presence of two subscribing wit-
25 nesses.

JAMES G. OWEN.

Witnesses:

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ALFRED A. AYA.