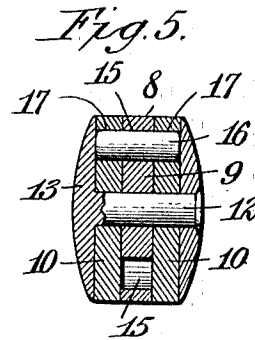
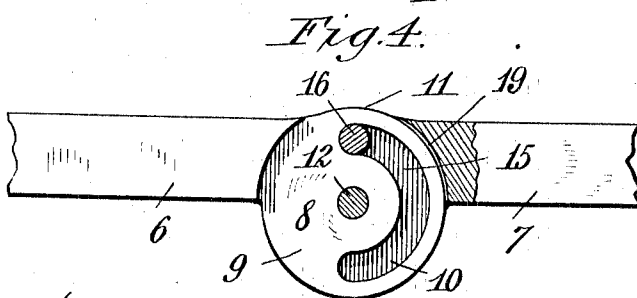
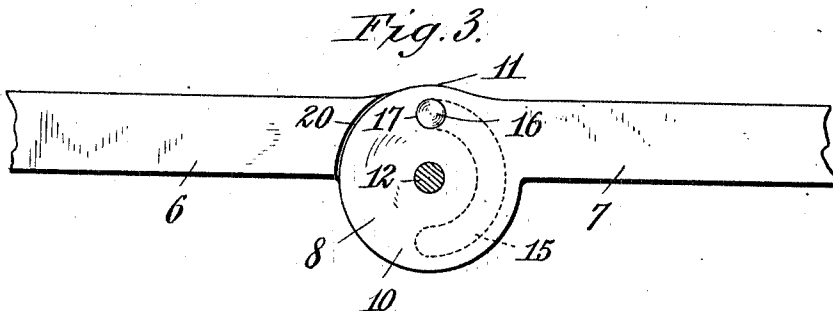
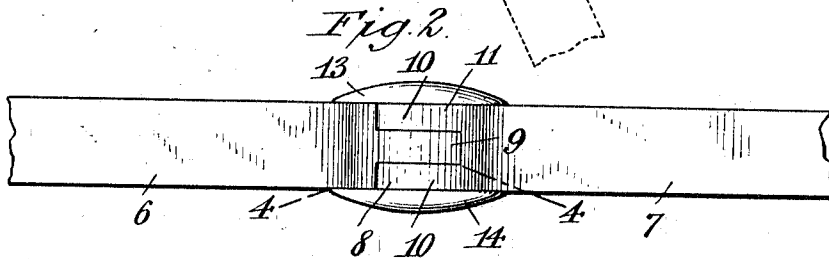
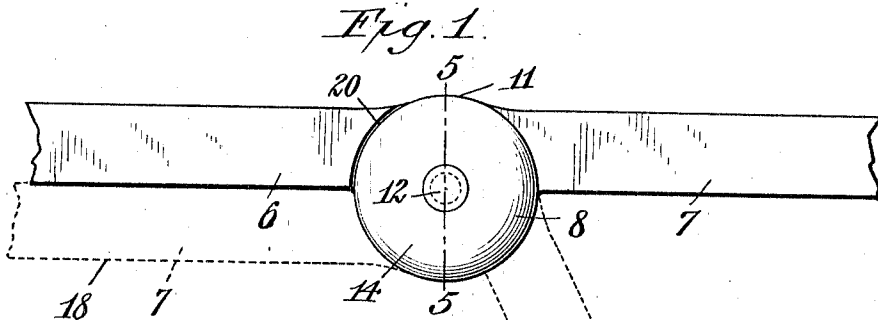


J. TEPPERT.
BRACE FOR VEHICLE TOPS.
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1,059,504.

Patented Apr. 22, 1913.



Witnesses:
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JOSEPH TEPPERT, OF BUFFALO, NEW YORK.

BRACE FOR VEHICLE-TOPS.

1,059,504.

Specification of Letters Patent.

Patented Apr. 22, 1913.

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To all whom it may concern:

Be it known that I, JOSEPH TEPPERT, a subject of the Emperor of Germany, residing at Buffalo, in the county of Erie and State of New York, have invented new and useful Improvements in Braces for Vehicle-Tops and the Like, of which the following is a specification.

My invention relates to braces for vehicle tops and the like and more particularly to the joints thereof, and it has for its object the provision of a simple, inexpensive, and durable joint in which a concealed stop is provided and all abrupt external projecting portions usually found on joints of this character are dispensed with, so that the possibility of pinching the fingers between the abutting parts serving as stops is entirely avoided.

In braces for vehicle tops it is generally the practice to paint or enamel the same, and another object of my invention is to provide a brace in which sufficient clearance is provided to prevent marring or otherwise injuring the paint or enamel so that the material from which the brace is constructed is always properly protected against the elements of the weather.

A still further object of my invention is the provision of a joint for braces and the like in which the friction is reduced owing to one part of the concealed stop being free to rotate, thus guarding against wear of the parts and assuring the two parts of a brace being held in proper alinement when in unfolded or opened position.

With these and other objects in view, my invention consists in the construction, arrangement and combination of parts to be hereinafter described and particularly pointed out in the subjoined claims.

In the drawings,—Figure 1 is a side elevation of a vehicle brace equipped with my improvements. Fig. 2 is a top or edge view of the same. Fig. 3 is a side elevation with one of the caps removed. Fig. 4 is a longitudinal section taken on line 4—4, Fig. 2. Fig. 5 is a transverse section taken on line 5—5, Fig. 1.

In the drawings in which like numerals of reference refer to like parts in the several views, the numerals 6 and 7 designate the two arms of a brace, such as used on a vehicle, top pivotally connected by means of my improved joint 8. One arm of said brace is reduced in thickness and has a single

circular joint-member 9 offset thereon and the other arm is bifurcated and has a pair of circular joint-members 10 off-set thereon and adapted to receive between them the single joint-member of the first-mentioned arm. The said circular joint-members have their peripheral edges extending slightly above the upper or outer edge of the brace, as at 11, and the joint-member or members of each arm curve gradually into the upper edges of their respective arms so as to provide an upper or outer smooth surface for the brace without projecting parts. A pivot-pin 12 having a large head or cap 13 integral therewith is passed through the joint-members and projects from one side of the brace, and to the projecting end of said pivot-pin a cap 14 is secured by upsetting the pivot-pin within a counter-bored portion provided in said cap. The single joint-member 9 has a segmental opening 15 through which is rotatably passed a stop-pin 16 having its ends also rotatable in openings 17 in the pair of joint-members 10, which latter straddle said single joint-member. Said pin with the ends of said segmental opening acts as a stop to limit the movement of the arms 6 and 7 relative to each other. Said segmental opening is of sufficient length to permit one of the arms to move through an arc of 180 degrees, or from the position shown in full lines in Fig. 1 to that shown in the dotted lines designated 18 in said figure, and by reason of the stop-pin being rotatable, the ends of the segmental opening, which are rounded, as well as the pin itself are almost entirely relieved of pounding when the pin rolls into contact with the ends of said segmental opening, thus preventing wear at the ends of said opening, whereby assurance is had that the brace arms will be retained in perfect alinement when unfolded. Moreover, by making the pin rotatable and rounding the ends of the segmental opening the device is rendered almost noiseless, and the pin which is of hardened metal will not wear as readily as would be the case if the pin were held against rotation.

Upon opening or closing the brace, the stop pin 16 is free to rotate within the openings 17 of the pair of circular joint-members 10 and is also free to move in rolling contact with the curved inner wall of the segmental openings 15, thus providing a free acting joint wherein friction is reduced to the mini-

mum and wherein the stop part is protected from the elements of the weather so that the co-acting faces thereof will not become rusted and cause the joint to work hard.

5 Between the arm 7 of the brace and the peripheral edge of the single circular joint member 9 a clearance space 19 is provided and between the arm 6 and the two circular joint members 10 of the arm 7, clearance
10 spaces 20 are also provided, thus permitting the brace to be painted, enameled, or otherwise coated and preventing one arm from injuring or scraping the coating from the other during the act of the opening or closing the brace.
15

It will be observed that the upper edge of the brace while it has a swelling at the joint by reason of the joint-members extending slightly above the upper or outer edges of the arms 6 and 7, is nevertheless perfectly
20 smooth and during the act of opening the brace to stretch the cover of the vehicle top over the seat, the fingers can be placed in direct contact with the joint without possibility of their becoming pinched, as all
25 projecting and abutting parts are dispensed with.

Having thus described my invention, what I claim is,

30 1. A brace or the like comprising two arms, one of which has a flat circular joint-member off-set thereon and provided with a segmental opening and the other having a

pair of flat circular joint-members spaced apart and straddling the first-mentioned joint-member and also provided with a pair of alined openings, a pivot pin arranged axially in said joint-members, and a stop-pin passed through said segmental opening and having its ends rotatable within said alined openings and adapted to roll into contact with the ends of said segmental opening.
35 40

2. A brace or the like comprising two arms, one of which has a flat circular joint-member provided with an axial opening and a segmental opening having said axial opening as its center and the other arm having a pair of spaced flat circular joint-members straddling the first-mentioned joint-member and having an axial opening and a pair of openings alined with said segmental opening, a pivot pin fitting into said axial openings and having a large head at one end serving as a cap, a securing cap fitting onto the other end of said pivot pin, and a stop pin passing through said segmental opening and loosely fitting the openings alined with said segmental opening.
45 50 55

In testimony whereof, I have affixed my signature in the presence of two subscribing witnesses.
60

JOSEPH TEPPERT.

Witnesses:

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