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Mending Tires.

As so many of our Canadian wheelmen are this year using machines fitted with Dunlop Tires, and the dealers do not seem to be in a position to supply instructions for mending them, we make no apology for making use of an article published in a recent issue of our English contemporary, *Cycling*:

Should a puncture unfortunately happen on the road, the best way to repair the 1892 tire is undoubtedly by what is known as

THE FLAP MODE.

Should the puncture be near the valve, or should difficulty be experienced in finding the puncture, owing to the air not escaping through the outer covering or through the spoke holes in the rim exactly opposite the puncture in the inner tube, or should the inner tube be full of holes, through the machine having been ridden after the tire has collapsed, the inner tube can be taken out in the following way: Remove ten inches of the outer covering at both sides of the valve, as already described, and you will find in the 1892 tire that the canvas has an overlapping flap about four inches long. (In tires made previous to 1892 this flap is absent, and the canvas bag must be cut open.) Then take the end of this flap between the thumb and forefinger and you will find you can easily peel it up until, when it is all peeled up, you find a ready-made opening such as would have had to be made with scissors. Remove the detachable portions of the valve from outside the rim, and with a spanner unscrew the nut which holds it; take off the washer which is between the nut and the rim, and then push the valve through the rim hole. Having pushed it through, draw it out, with the air-tube to which it is attached, and, the air-tube being now loose, look first a few inches one way and then (if necessary) the other, until you find the place where the two ends of the air-tube are joined. It won't hurt the tube to stretch it a little. Upon trying to part the joined ends of the air-tube, you will probably find them stuck too tightly together, and will have to use benzoline (or coal-tar naphtha) to loosen them. If you can-

not obtain either of these spirits, take a scissors and cut the tube straight across, three or four inches distant from the joint. Next tie a thick, soft string to one end of the tube and pull the tube out from the other end, and leave the string in the tire for the purpose of pulling back the tube when repaired. Having got the tube out of the tire, tie up the ends of the tube tightly, and, having inflated it, immerse it bit by bit in water—distending the tube by pulling at the same time, so that minute holes which might not otherwise be apparent may be located—when the puncture or punctures will easily be found, and can be repaired as already described.

When the tube is repaired the string should be tied to the end farthest from the valve, and it should then be drawn back into position inside the tire until the valve comes exactly opposite the hole in the rim. The ends of the tube where divided should then be rejoined, to do which, scrape the inside of one end and the outside of the other from about an inch from the division and moisten with solution, and, having left to dry for five minutes, insert one end of the tube into the other for an inch and press the sides together with the fingers until the solution adheres properly.

One end is turned inside out for an inch, the surface cleaned and coated with solution. A corresponding inch *outside* the other end is also cleaned and solutioned. When nearly dry the two ends are brought parallel and flat against each other, and the furthest side is deftly turned over so as to complete the join. It is necessary to do this quickly and neatly, as the two surfaces will adhere closely the moment they touch, so that they must be brought clear and clean into the proper position in a single movement.

When the air-tube is nicely joined up, rub some powdered French chalk (or, on an emergency, flour will do) over the sticky places, to dry them, as the tube must not be allowed to stick to the canvas bag; and then, deftly replacing the valve with its washer and nut, stick down the canvas flap exactly in its former position, and close up the tire as already described. In replacing the canvas flap certain precautions must be observed. The tire should be in a deflated condition, and