Feb. 15, 1938. V. J. DODD 2,108,745

ADJUSTABLE CONTROL LEVER

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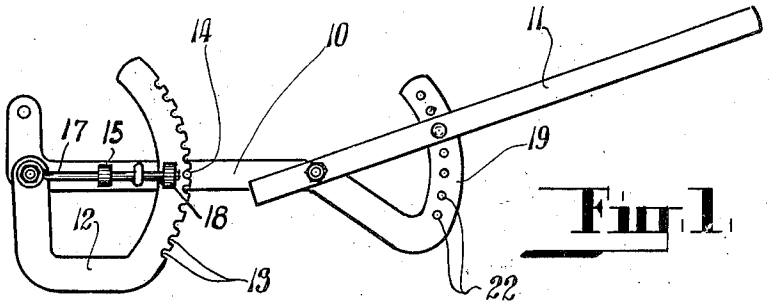


Fig. 1.

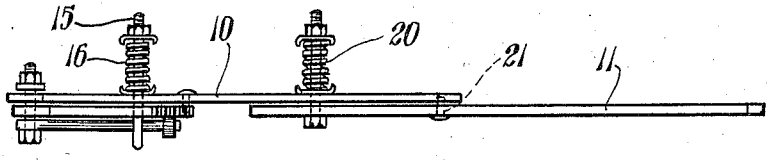


Fig. 2.

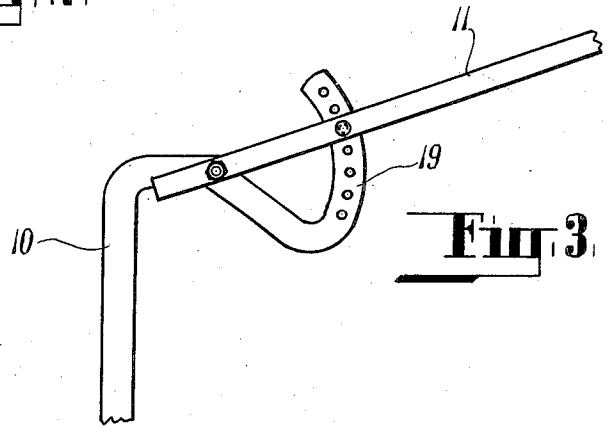


Fig. 3.

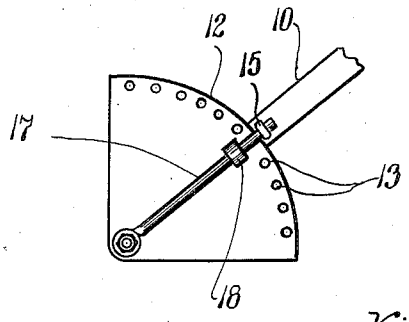


Fig. 4.

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ADJUSTABLE CONTROL LEVER

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2 Claims. (Cl. 74—525)

This invention relates to an adjustable control lever.

The operation of the conventional types of control levers presents great difficulty when these levers are of a considerable length. This is particularly the case when the control levers of agricultural implements are to be operated from a tractor. This is because the great length of the levers means that there is a considerable angularity in their positions and further that the release of the pawl by trigger mechanism is generally a matter of some difficulty.

The adjustable control lever, the subject of the present invention, is therefore of particular utility as applied to the operation and control of tractor-drawn implements but its use is of more general application and is not so limited.

The invention consists broadly in the use of an articulated control lever that by a simple movement can be reset at a convenient angle and by another simple movement freed to operate a control. The invention will however more readily be understood by reference to the accompanying drawing in which Fig. 1 is a side elevation of a suitable control lever; Fig. 2 is a plan thereof; Fig. 3 shows the application to a vertical lever and Fig. 4 shows the application of the control to a closed type of quadrant.

As shown in the drawing the control lever is in two articulated parts namely the operating part of the lever 10 and an adjustable extension 11. The operating portion of the lever is suitably pivoted in relation to the quadrant 12 and it has an extension where the control becomes effective. The quadrant 12 will as usual be provided with a plurality of slots 13 which may of course if desired be in the form of holes or openings as will subsequently be referred to. Adapted to rest and be held in one or other of the slots 13 is a dowel or pin 14 that is connected to the part 10 of the lever. There is an eye jockey bolt 15 positioned transversely and passing through the lever 10 and this jockey bolt is engaged by a spring 16. There is a jockey member 17 hinged at one end and passing through the eye portion of the jockey bolt 15 and then extending and acting as a bearing for a jockey roller 18.

The effect of the construction described is that there is a definite tendency to keep the dowel pin 14 in a slot 13. On the other hand by moving the lever 10 laterally in one direction the dowel pin can be pulled clear of the slot and lifted or lowered to a desired position when on being released as far as lateral movement is concerned the dowel pin 14 will jump into and be held in another slot 13. The extension 11 of the lever 10 is pivoted thereto and is adapted to be held in one or other of a number of relatively different angular positions on a quadrant extension 19 of the lever member 10. There is a spring 20 that in conjunction with a bolt serves to hold the extension in a fixed lateral position with the quadrant extension 19. This is effected by the use of a dowel pin 21 on the lever extension 11 and locking holes 22 in the quadrant 19. When the lever extension 11 is moved laterally in one direction the dowel pin 21 is freed from the hole in which it is temporarily positioned against the action of the spring 20. The lever extension 11 can then be moved into a new position of desired angularity with the lever 10. On releasing the lateral effort the dowel pin 21 will take up a position in another locking hole 22. The arrangement illustrated in Fig. 3 is similar except that the lever member 10 is vertical. In Fig. 4 is illustrated the arrangement when a closed type of quadrant is used for locking the lever member 10. In this case there are holes 13 for locking purposes in place of the slots in the quadrant 12 shown in Fig. 1.

The arrangement operates as follows. It will be assumed that a tractor driver is controlling an implement from the tractor seat. He finds for example that the lever extension 11 is too low for him to give the necessary control movement. He thereupon pushes the lever extension laterally so as to free the dowel pin 21 and then he lifts the lever extension 11 until it has a new angularity in relation to the portion 10 of the lever that will allow him to give the necessary control movement to the latter. He thereupon releases the lateral pressure on the lever extension 11 and the said extension is thereby locked in the quadrant 19 in the desired position. He then pushes the lever laterally in the opposite direction to that first mentioned. This has the effect of releasing the dowel pin 14 from the quadrant. He can then apply the necessary control movement through the lever extension 11 which of course operates with the portion 10 of the lever as one unit. When the necessary movement has been given releasing the lever results in it becoming locked in a new position in relation to the quadrant 12.

I claim—

1. An adjustable control lever comprising a slotted plate, a member being pivoted to and having a face resiliently held against one face of said slotted plate, means mounted on said member for normally engaging the slots of said slotted

plate, a slotted quadrant formed at the free end of said member, an extension lever being pivotally connected to said member and located on the aforesaid face and resiliently held against said quadrant, and means mounted on said extension lever for normally engaging the slots of said quadrant.

2. An adjustable control lever comprising a quadrant, a substantially J-shaped member pivotally connected at its straight end to said quadrant, means tending to hold one face of said member against a face of said quadrant, a pin mounted on said member face for normally engaging the slots of said quadrant, said member having openings formed through its free curved end, an extension lever, a pin mounted on said extension lever for engaging the slots formed in said J-shaped member and resilient means tending to hold one face of said extension lever against the aforementioned face of said J-shaped member.

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