COMPLETE SPECIFICATION

Improvements in Devices for Sharpening Knives of Slicing Machines

The housing 9 of the sharpening device is pivotally attached by a bolt 8 to a supporting part 7 of the slicing machine frame, the axis of the bolt 8 being substantially parallel to the axis about which the circular knife 5 rotates. A spring washer 10, or other frictional member, is interposed between the head of the bolt 8 and the bolt-embracing eye of the housing 9, the washer 10 exercising a frictional action between the housing 9 and support 7 sufficient to maintain the housing 9 in any position with respect to the knife 5.

The grinding element consists of an abrasive wheel 13 which is journalled within the housing 9. The burr-removing element consists of an abrasive wheel 15 secured to a shaft 16 which is journalled in a sleeve 24, this sleeve being axially slidable but non-rotatable in the housing 9 and its axis being substantially parallel to the axes of the knife 5 and bolt 8. The arrangement is such that the wheel 15 and shaft 16 can be axially moved in unison against the pressure of a spring 19 out of the plane 18-18 of the cutting edge of the knife by means of a pin 23 projecting from the sleeve 24. A control cam 22 provided with inclines A and B is mounted fast on the aforesaid supporting part 7 of the machine frame, the cam 22 being attached to the bolt 8 by a screw 8'. The cam 22 serves for automatic positioning of the burr-removing wheel 15 against the knife edge when the housing 9 is turned into the working position. Assuming the device as a whole to be raised in the inoperative position, in which both wheels 13 and 15 are raised clear of the knife, the spring 19 maintains the wheel 15 to the maximum extent beyond the bevelled rim of the knife back. When the device as a whole is turned down about the bolt 8, the pin 23 meets the incline B of the 100 cam 22 before the burr-removing wheel 15 reaches the knife edge. The pin 23 is then displaced by the incline B against the spring pressure, and the sleeve 24 and shaft 16 are thus forced to slide axially to 105 such an extent that the wheel 15 passes above the knife to the opposite side of the plane 18-18. Next, the pin 23 reaches the cam incline A so that the now lowered burr-removing wheel 15 is returned 110