



Fig. 6—Showing the up- and down- (against wall) ramps by which the cows reach and leave the raised platform. Fig. 7—Cow entering the washing bail on the up-ramp. The cow at left is leaving the raised platform by the down-ramp. Fig. 8—Udder washing in the washing bail on the up-ramp before the cow reaches the raised platform.

provide the finance to introduce any method or innovation that might be available anywhere in the world if the Dairy Division considered its adoption would provide an example to New Zealand dairying.

Internal Return Race

As a result, the tandem elevated-bail system was selected and plans and sketches were drawn to fit these bails on an elevated platform 2ft. 6in. above the floor level of the standard New Zealand open-fronted type of shed. In America the cows leave the milking premises at the point of discharge from the elevated bails and the raised platform has a width of 6ft. In Mr. Prevost's building it was thought desirable to confine the exit of cows within the building and a return race was constructed to link with the main control race, which increased the width of the raised platform to 9ft. This means that if tandem bails are adapted in this form to the New Zealand type of shed, a raised platform 9ft. wide is required if the exit of cows is confined within the building and one 6ft. wide if the exit of cows is by an external race. (See Fig. 9.)

The raised platform extends the length of the building and a space of 8ft. is required for each cow. The total length is increased by the 6ft. required for the entry and exit races. The cows reach the elevated platform by a 3ft. wide ramp at the end of the shed, as shown in Figs. 7 and 8, and on reaching the higher level they turn to enter whichever tandem bail is empty. On the up-ramp is placed a washing bail, which ensures convenient udder washing in a stream of clean water from the hose tap provided. On being milked the cows turn left from the tandem-bail race and return by the internal exit race at the back of the building and the down-ramp to the main control race and the pastures intended for them.

Flooding of Floor

The floor of the raised platform is kept flooded by a stream of water flowing evenly over the surface from a perforated pipe fitted behind the protecting kerb, and this reduces dust, assists keeping the premises cool, and immediately removes any manurial deposits. Such provision is also made in the main holding yard.

The up-ramp has a grade of 1ft. in 6ft., the cows being raised the required 2ft. 6in. in travelling 15ft. (See Fig. 6.) The down-ramp has an easier grade, about 1ft. in 9ft. 6in., and this provides the drainage fall from the raised platform. The front of the raised platform is protected by a dwarf wall 12in. high, reduced by 6in. at convenient points to provide for the manipulation of teat-cups. The drainage is taken in one straight fall to the back of the building and discharged along the return exit race and down-ramp. Thus the shed type conforms to New Zealand standards and conditions, with the exception that the cows face the releaser room end of the building during milking rather than the back of the shed as is usual.

High Standards

Every effort has been made to provide permanently satisfactory surroundings, the cleanest possible air supply, and every convenience in equipment and design to provide the highest possible standard of hygiene. To this end the premises and layout