opens chambers (12) and (29), allowing all brake pressure oil to flow to drain. With no oil pressure to the brakes, the brakes engage to prevent movement of the machine.



Undercarriage

(1) Rear idler. (2) Rear roller frame. (3) Front roller frame. (4) Front idler. (5) Track. (6) Major bogie. (7) Minor bogie. (8) Major bogie. (9) Track rollers. (10) Major bogie. (11) Major bogie.

## Undercarriage

Because of the location of the final drives, steering and brake groups, and bevel gear on a common center line, removal and installation of the power train modules is much easier than for earlier tracktype machines. Another advantage is that the final drives are raised above much of the abrasive wear and packing conditions during operation. Also, there is a reduction of shock loads through many of the power train components. (Shock loads are forces caused by ground impact during operation, or when implements are suddenly engaged). In this elevated (raised) location, the final drives do not support any of the weight of the machine. The elevated final drive permits the under carriage and suspension to be made resilent (flexible).

Four major bogies (6), (8), (10) and (11) pivot (turn) on sealed and lubricated cartridge pins. The front and rear major bogies (6 and 11) each support an idler and a minor bogie. Each of the two major bogies (8 and 10) in the middle of the roller frame supports a minor bogie. Each minor bogie supports two track rollers. The minor bogies also pivot on sealed and lubricated cartridge pins. The idlers turn on sealed and lubricated shafts.

Eight rubber pads are used in pairs on each roller frame. A rubber pad is installed on top of each major bogie. The other four rubber pads are installed on the bottom of the roller frame in alignment with the pads on the major bogies. The pads control the amount of movement of the major bogies. Because the rubber pads are flexible, mud and debris is removed from them during operation. The resilient (flexible) undercarriage arrangement keeps more track on the ground at all times, decreases undercarriage wear, and increases operator comfort. Sealed and Lubricated Track is standard equipment.