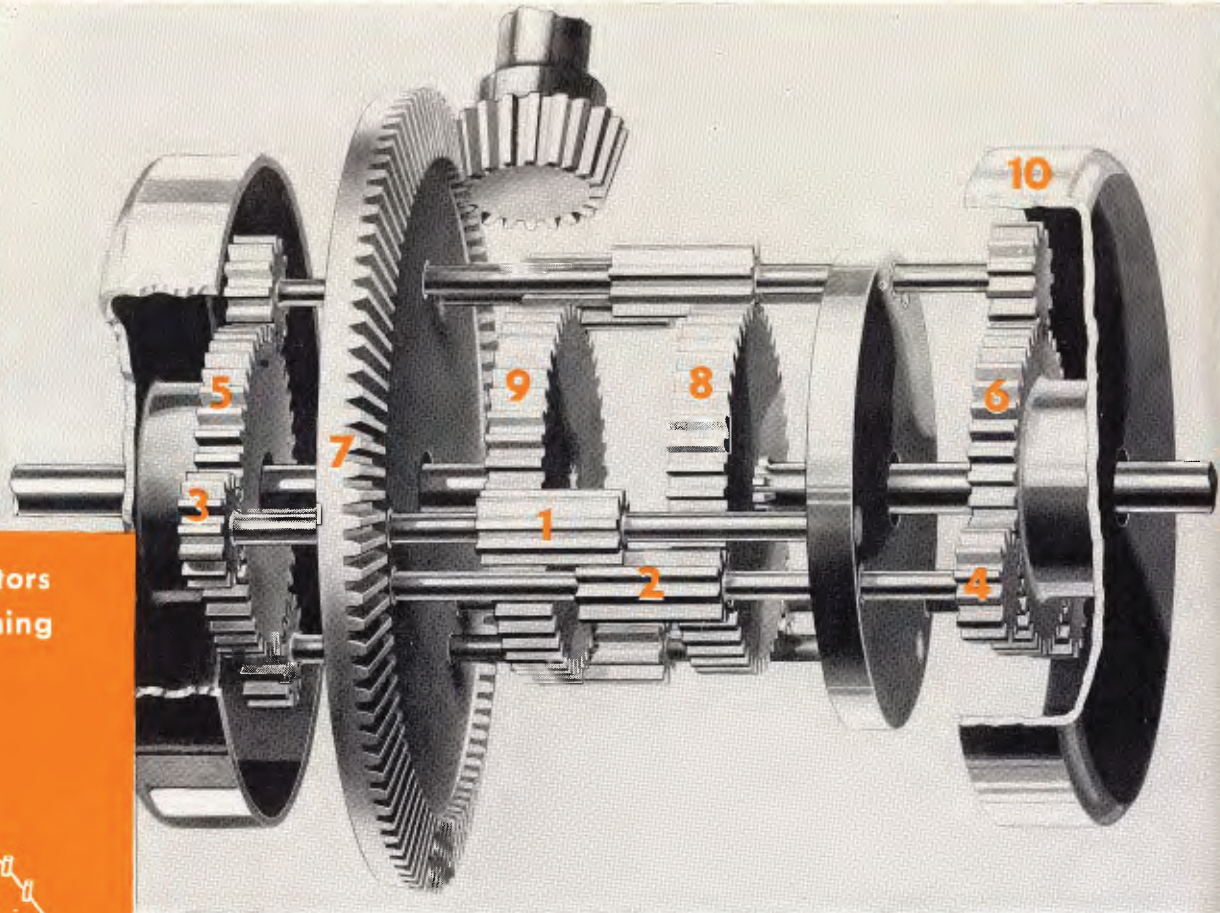


Cletrac
Tru-Traction Tractors



Clutch Steering Tractors *Zig-Zag* when turning



Oliver "Cletracs" are safer traveling downhill with a heavy load pushing the tractor. They always steer the same. With ordinary crawler construction and with a heavy load going downhill, it is necessary to steer in the opposite direction—to pull on the left lever to turn right and on the right lever to turn left. The reason is that the engaged track acts as a brake. The load tends to swing the tractor in the easiest direction against the disengaged track. Because Oliver "Cletracs" have Tru-Traction (power on both tracks at all times), they steer the same going downhill under a heavy load as going uphill.

OLIVER "Cletracs" pull on both tracks when turning . . . and turn on a true course under Control



HERE IS WHY ONLY **OLIVER "Cletracs"** HAVE TRU-TRACTION

Both Tracks Pull at All Times

The diagrammatic view of the differential assembly above illustrates the fundamental principles of Oliver "Cletracs" Controlled Differential Steering which effects Tru-Traction.

When the tractor is going straight ahead, the whole differential assembly driven by the bevel gear No. 7 rotates as a unit without any internal motion. Now let's see what happens when we wish to make a turn to the right. A pull on the right control lever holds stationary the right steering drum No. 10 and the drum gear No. 6 which are fastened together and which rotate on a bronze bushing on their shaft. As a consequence, pinion gear No. 4 and differential gear No. 2, which are connected to bevel gear No. 7 by means of shafts, begin to turn forward. Final drive gear No. 8 is slowed down because No. 2 gear is turning and rotating in the same direction. At the same time, differential gear No. 1, rotating around the final drive gear No. 9 in the opposite direction, is speeded up.

In turning an Oliver "Cletrac" there is no disconnection of power to either track . . . no jerking, no twisting, but smooth, even turning with power delivered to both tracks at all times. This is an exclusive feature used in all Oliver "Cletrac" tractors.

The entire differential assembly runs in a bath of oil at all times to keep wear at an absolute minimum.