The Fastest Farmall

by Frank Ball

The fairly rural atmosphere of Alpine in the forties provided me with numerous opportunities to learn the potency of applied physics. However, many of these opportunities came and went long before I had ever heard of applied physics. In truth, it is a matter of some wonderment to me, that our questions were not more often nipped in the bud, by the answers.

As a community, Alpine straddled the line marking the usual lower limit where snow would fall and accumulate on the ground. Since weather is one of those things that is guided by the rules of chaos, there were times every several years that snow would fall and stick over the entire community. When this happened, there was great excitement among the male population around the age of eleven years. It provided a situation where the adult contingent was somewhat more occupied than usual. In addition to conducting their normal business, they were often deeply occupied by getting cars to start or getting them to move in the desired direction once they were started. As a result, any attention paid to the activities of the kids was somewhat diluted. In addition, to use a strange mixture of pun and metaphor, the existence of the unusual snow was like icing on the cake.

It was on just such an occasion that Jimmy Gavin and I decided, a more rewarding activity than a day in school, would be to take my dad's tractor for a ride up Old Viejas Grade north of the Indian Reservation to Descanso, perhaps a ten mile jaunt. This tractor was like a cross between a real rubber tire tractor and a toy - a Farmall Cub. We started off early in the morning so there was almost no automobile traffic and what there was did not go any faster than we did. The first three or four miles took us right through the middle of town, on pavement covered with a little snow. Our concern that someone would interfere with our expedition turned out to be unfounded. I think the snow on the paved road kept the tractor from looking out of place. Once in a while we traded duties between driver and lookout, the driver being the more prestigious occupation. Since I had frequent opportunities to drive the tractor at home, I let Jimmy do the lion's share of the driving.

Leaving the pavement somewhere in the Indian Reservation, we started to gain altitude a little faster. Naturally there was a commensurate increase in the depth of the snow on the ground. For a time, as lookout, I had been standing on the draw bar where the implements are normally fastened. As the snow got deeper it started to come over the top of the draw bar. This made my feet get cold in short order, making it necessary for me to find another perch. I climbed a straddle of the gas tank like riding a horse. I was ac

customed to thinking a tractor which wasn't chained to a tree stump would always go forward if commanded to do so. Applied physics came into play in many ways here, comparative friction being central to our effort. I learned that tractors have no magic that saves them from suffering the indignity of drive wheels slipping on an icy surface. In fact, long before we reached Descanso the forward progress was very hard to come by. I suppose, if our movement were to stop completely, help would have been even harder to acquire.

Our attention was so absorbed in making the tractor go forward more than any other direction, we were unaware how much of the day had slipped away. By the time we reached an intersection where other vehicle tracks made our progress more dependable, it was past noon. Having attained our geographical goal, the air temperature made the prospect of returning home the way we had come a bit short of entertaining. We drove out to Highway 80 at Descanso Junction and discovered that snow plows had done their work there, but almost no traffic was to be found. Actually, the cold and wet had soaked through our meager defenses. This made the direct route down the grade on Highway 80 the only choice we could conceive as being appropriate for getting home. We were about to learn yet another lesson in applied physics!

Jimmy drove and I stood on the draw bar as we lumbered down the broad highway at a pace, minuscule compared to any vehicle I had ever occupied in that location. For all we could see or hear, we might have been the only humans on the planet. At first, the journey seemed like it was going to be boring. After a mile or so, as we approached the spring on the north side of the road where overheated motor vehicles or horses could be watered, the grade began to descend more rapidly. Jimmy said, "This is more like it" as he kicked the tractor out of gear. At first the speed remained at about twelve miles an hour, the stated top speed of the tractor. We soon noticed that top speed is not necessarily limited by the printed words in a manual. We noticed a couple of other things as well. The tractor tires did not get a tractor-like grip on the ice patches left by the snow plow. More important than that, the brakes were not designed for this service. By the time Jimmy even tested the brakes, we had surpassed a critical speed. At this rate and grade, the only consequence of pushing harder on the brake peddles was to get more smoke. Getting the machine in gear to help slow it down was hopeless. We were already going about three times the speed that top gear would give using the highest engine speed the governor would allow. And no gear in the transmission had even heard of synchromesh. At this speed, standing on the draw bar did not give the kind of security a lookout should have. I searched for something that would support my weight if the vibration should dislodge both of my feet simultaneously instead of one at a time. I could find nothing. It was getting hard to find anything to hold onto that wasn't rotating or about to fall off.

By some mix of skill and divine providence, Jimmy managed to reach a more level part of the road without the occurrence of the obvious disaster. Needless to say, the remainder of the trip was taken under more controlled conditions. At a later date, I remember a time my father noticed my brother driving the same tractor in what seemed to him to be a reckless speed. I was strictly a bystander but while my brother was receiving a stem lecture on how tractors are top-heavy vehicles made to pull slowly, I remember thinking, "If you only knew?"	
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