

boy on his father's back looks eagerly through the entrance just as the fireman swings a shovel of coal on to the roaring fire. "Ooooh," he asks, "is he going to boil his billy?" It's some billy. One hundred and thirty tons of it. To keep it boiling means a lot of work for that fireman, no chance to let up—mile after mile of hard, dirty, sweating work in cramped conditions that would have even a physically-fit man in agony before the top of the first rise. No wonder this fireman's muscles look as strong as the steel of the engine.

Engine, one hundred and thirty tons; train, nine hundred tons; coal, seven tons; fireman, 198 lb. You can't help being impressed. But you wouldn't like his job.

You smile at the red hearth brush and the small boy while you're waiting for the journey to continue. If you haven't ridden before in the cab of an express engine that's about all the amusement you're going to get for the next hundred miles. Since you were five years old you've wanted to ride in the engine of an express. Now you wonder why. It takes about three minutes to come to the conclusion your ideas have been misdirected.

You wouldn't think a one hundred and thirty-ton engine would jump. It does. It also leaps, sways, kicks, thumps, jiggles, jogs, twists, turns, knocks, snorts, roars, rumbles, rears flings, swings, and shudders. And the bad thing is that it does all these things at once, in the same roaring breath. You were sick in the inter-Island ferry one night, but you must have been fooling yourself—it was never like this.

You hang on for your life (your *very* life); and in the first few minutes the whole train is completely wrecked, hundreds killed, when this engine (1) jumps off the line; (2) runs into a cliff; (3) smashes into a small station; (4) can't get round a curve; (5) blows up; (6)

leaps over the side of a bridge into a river; (7) shakes itself to pieces; and (8) can't get into a tunnel because the entrance is too small. In the first minute you think that engine is out of control. After the second minute you're certain. And you wonder, too, why the driver sits there so unconcerned, indifferent apparently to the danger and the narrowness of the escapes—what's the use of blowing the whistle at this stage—and the fireman only makes matters worse by heaping on more coals. In an aeroplane you have a parachute, in a ship a lifebelt; in the engine of an express you have nothing but the small consolation that when something happens you'll be the first to know about it.

Yes, for the first few miles, if it's the first time, a journey in an engine is at least alarming. There is none of the smoothness of a journey in a carriage seat, none of even that cramped comfort. In your seat, waiting for the long night to pass, you wonder sometimes at the dawdling speed; in the engine you wonder that anything on rails can move so fast. You ask the driver just what the speed is. Thirty-eight miles an hour. More like one hundred and thirty-eight, you'd been thinking. For them, forty miles an hour is a good average; up steep grades it is less; along straight level stretches it rises to almost sixty.

The noise, that roar of fire and steam and moving wheels, is terrific; it is a nuisance, too, because there is so much you want to ask the driver and his mate. You yell, from a foot away he yells back, but it's not much use. It's only on the down grades, when the steam is turned off, that it is quiet enough to find out the things you want to know. And then only with difficulty.

"A man wouldn't have to be in the front like this if he'd known as much then as he does now." The driver is telling you, yelling, that it was in 1900

