

Buffer Stop

I, a buffer stop, sit at the end of the tracks in stations always ready to catch a lost train. I'm very strong and big and my job is to catch trains if they don't stop themselves with their brakes. I'm built from cast iron and steel. Inside my cavity is a huge volume of oil. When my pistons are pushed the oil is compressed and I absorb the kinetic energy being forced on me. I can absorb huge amounts of force. I was built by strong, skilled men, quite a long time ago in Ipswich by the manufacturers Ransome and Rapier, and there are other hydraulic buffers just like me in train stations all over the world.

No one knows this apart from me, but when I'm catching a train and slowing him down, as the oil in my vessel gets compressed and confined it gets hot and starts to bubble slightly. I don't know if the force ever leaves the oil inside me. Its bolted down by 40 bolts, big 50mm ones. The oil inside me is mineral oil, it's a by-product of petroleum, which itself is formed by large pockets of dead matter being compressed and heated underground. Petroleum means 'rock oil' in Latin. The oil in my chamber hasn't been changed since I was built in around 1878, so the oil absorbing the force of today's trains is oil from the 1870s. Last month the one remaining man who worked at Glasgow Central who knew how to service and re-set me retired.

I remember the Largs train crash in 1995 when his brakes failed and went straight through the buffers and through the station and stopped in the middle of the high street. I wonder why the high street stopped him but the buffers didn't. Alone, I think I could stop a train going about 6-10mph. You get some newer buffers saying they could stop trains going at much higher speeds. There are hundreds of us in the UK, and whilst 10mph is the fastest train we each could stop alone, together we can stop a vehicle travelling at hundreds or even thousands of miles per hour. In 2003 Train Protection and Warning Systems were fitted to make the job easier, there are sensors and signals on the tracks that automatically apply the brakes if a train is acting dangerously, so I'm very rarely used now.

I always think of trains as 'he', but I couldn't say why. I think I understand myself and the others that I encounter through the physical interactions we have. Maybe mine is quite a passive action, I'm reacting to force, my parts are compressed and reactive and resisting force, or helping force resist itself. I suppose I'm accepting a stereotype that trains are violent by nature, and that force is violent by nature.

Trains are powered by from electricity now, but I don't know how this differs to coal, as most electricity is generated from burning oils and woods and coal and all three are just different configurations of carbon reacting differently to the conditions of dark, damp, cold weight from being deep underground, so I suppose they still get their speed from oil. Oils a funny thing as it is used both to speed things up as a lubricant, but also to slow things down as a non-compressible liquid.

Absorbing lots of energy and force is what I was made for, but I wonder if I could ever do anything else, or if I didn't have to do this anymore would I just be a heavy piece of iron? I could be melted back down and turned into something more useful.

It's possible I was once something more useful. Cast iron is often recycled, and ive heard that some buffers were even made of steel. Steel and Cast Iron are both made from a base of Iron ore, it's the amount of carbon added to it, and which metals its alloyed with, that is the main distinguishing factor between the materials, along with the amount of heat it is subjected to and for how long. Now that I think about it I can't actually be entirely sure of the provenance of my metal; if I were made from steel, would I still have the same experience as a buffer, would I have a different understanding of my role, of my history, or a more nuanced relationship to trains, and would I feel as comfortable talking about being a buffer. Maybe it doesn't matter as long as my experience is of buffering, and I'm covered in paint anyway. Although if a hard and fast train hit me hard, my metallurgical content would be obvious, I would either crack or bend or shear, based on my past exposure to heat and force, and carbon content. You wouldn't know a wooden buffer was wooden until it was hit by a train.

The trains on my tracks often don't arrive at the time people expect them to. The first standardized time system was introduced in Great Britain by British Railways on December 1st 1847 to replace local mean time, which varied from place to place. It was called 'Railway Time'. Trains can't be late if time was invented by the railways. If the time in a place was dictated by when the train arrives, then the measurement of time is the measurement of the speed a train can travel. The passage of time is the length of the trail of steam left behind a locomotives chimney, the speed at which a man can shovel coal into its engine and the distance a drop of sweat has to roll from his brow to the tip of nose. And maybe time stopping is deciding to stop shovelling coal into the furnace. Trains were not used for commuting to work in their early history, they were conceived of as a more efficient way to move cargo than canals. Trains became late when people relied on them to get to work, and even later when the rail operators were privatised in 1995, the same year as the Largs crash. If there was another crash in a town like Largs today, there probably wouldn't be a high street to stop the train.



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