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WHAT CONSTITUTES A STATIONARY ENGINEER.

A correspondent in a recent number of the *Stationary Engineer* says: "In answer to the inquiry as to the definition of stationary engineer I would give this: 'Any person capable of erecting and running a stationary steam plant successfully and safely.' Some will take exceptions to this answer, and say it is too strict, claiming that there are many persons who can run a plant who are incapable of erecting it. Others will say it is too liberal, as it would include those handling plants in which there was no engine used.

"To the first I would say that I hold no man is an engineer who could not have put up the plant he runs. To the second I reply that there are numerous steam plants used for heating, pumping and other purposes, where no engine is used, which require the attention of persons equally qualified with those who have charge of plants using an engine, and who have an equal right to the title of stationary engineer.

"In a large Eastern city is a firm who makes a business of manufacturing machinery for steam plants. In this same city there lived a young man whose ambition was to become an engineer. With that intention he entered those shops as an apprentice. Step by step he mastered each branch, including several months in the fireroom. After serving his time in the machine shop, he worked a year in the boiler department, in order to aquaint himself with boiler construction. Having a chance to take charge of a plant which he had helped to erect, he did so. Under his management everything was soon running smoothly and satisfactorily. He was justly proud of his plant, and took pride in showing it to visitors, together with his indicator cards and records of engine and boiler tests, and when Saturday night came he received his wages with a consciousness of having earned them.

"After having been there over three years, his employer, after paying him on Saturday night, told him that times being dull, they would be obliged to cut down expenses, and that his salary must be reduced. Feeling that he had been earning all that he had received, he refused to take the reduced wages, and picking up his tools left for good. Monday morning the fireman was in his place and a new man at the scoop. It was spring, and navigation on the great lakes just opening, he secured a position on a steamer, and continued to run until December found them icebound, and laid up for the winter at Chicago. He then went South and took a job in the great coal fields of Illinois, running an engine at a mine. Here he staid until the following summer, when, the miners going out on a strike, the works were shut down and he was again out of work.

"He then went to San Francisco, where his love for the water induced him to secure a position on a steamer running to different parts on the coast. This place he held for four years, until the vessel becoming unserviceable, the owners laid her up. A new railroad was being built, and he took a position as engineer on a construction train. The road being finished, he was offered a job in the shop, which he accepted. His abilities soon becoming known, he was given charge of the shops at a salary more liberal than he could receive as an engineer. This position he still holds.

"What would you call him? If you asked him he would reply proudly that he was an engineer, and I think he is right, and that he is no less an engineer to-day than he was when in charge of the first plant because he learned that as a trade, and because he is competent to perform all the duties of such a position. In contrast to this man, I will write of one whom I met several years ago. I stopped at a mill, one of the kind very common in the timbered portion of the Western and Southern States, a saw-mill with a grist mill attachment, where they divided their time between sawing logs and grinding corn for the farmers of the surrounding country. In entering, the only person that I would have taken for the engineer was a boy of perhaps sixteen years, who was cutting slabs near the boiler. Asking him if he were the engineer, he said:

"'No, that was the engineer on that barrel near the saw.'

"Looking in the direction indicated I saw the man busy mending a whip lash for a teamster who stood near, while the sawyer and men were engaged rolling a large white oak log on the carriage. While these preparations were going on, I took a look around the mill. The engine, a plain slide valve, was running slowly and was pounding in a way that would remind one of the Anvil Chorus on a small scale, and steam was whistling from around the wellfluted piston rod. The boiler, which was an ordin-