

ARGUMENTS

Here's the place to unload your gripes to editors, manufacturers and fellow engineers



Rotatory Wonder Solves Farm Problems

BRITISH NEWSMEN describe this life-size, rustic machine as a "joyous and improbable attempt to achieve the impossible." And no wonder. It's Rowland Emmett's "Hogmuddle Rotatory Nigger and Fidgeter," built by J. E. Slater, Ltd., Kibworth, Leicester, for Petters, Ltd., Staines, Middlesex. Emmett, who is well-known both in England and the U. S. for his artistic genius, is the self-styled chairman of Improbable Railways.

Emmett claims that this complicated machine will do all the work of a farm

—from inducing eggs to filling out government forms. Here are some of its features, as reported by the British magazine, *The Engineer*.

Immediately behind the pylon supporting the 10-hp engine is a concurrent 4-stage baler. Next to it, an egg-inducer with X-ray attachment encourages egg laying by the resident hen. A rotary stook drier and setter and an agromechanic's seat complete the first section of the nigger and fidgeter.

A hogmuddle free-flow arch joins the

machine's two sections, and allows access for the local hunt, which might otherwise be disturbed by the length of the machine. Above the arch is a combined hedge trimmer and gentleman's hairdresser, consisting mainly of three pairs of spring-operated scissors.

The secondary section contains a wurzle digger, scrubber and polisher, embracing the fully automatic hogmuddle carrot rejecter. Wurzles are dug by the 4-fork scrabbler, which moves them from the earth and impales them on prongs of the large ferris wheel. Should a carrot inadvertently be dug, all rotary movement stops. The carrot is advanced slowly toward the rejecter-trap, which leaps forward to receive it. Trap passes the carrot to the vibratory carrot-fuddler, which renders the carrot entirely harmless, except for the subsequent carrot-puree.

There is a control office, devised for taking care of most of the farm paper work. Government forms moving smartly on an endless belt are filled in, stamped and carefully disposed of quite peacefully as the machine is working, leaving the gentleman-farmer entirely free to enjoy the revolving featherbed.

Beneath the bed a rotary haystack is fed by a reversible hay lift that forms a useful method of supplying the farmer with refreshment.

(Sketch: British) A sketch of row Emmett's Hogmuddle. A large motor kind of beast, extensively given to Europe as food for cattle.

Do You Advocate Fuel-Oil Additives?

THE ARTICLE, "18 Diesel Q and A," May POWER, mentions use of lube oils with additives to fight sulfur. But it does not mention using additives in the fuel directly. Do you advocate their use, and have you ever tested any?

There are several on the market over here, and I understand that at least two German firms propose their use. Has any reader had experience with using additives directly in the fuel, and what have been the results?

R. C. MUELLER

St. Nom la Breteche, France

We Don't Need Earth-Leakage Trips

REGARDING this question of grounding techniques, September "Arguments," I was glad to note Whitaker's pertinent

statement, "Our rules for grounding portable equipment . . . are based on conditions existing in the U. S."

From 1935 to 1938, I was in India where the earth-leakage breaker was being applied to local bungalow installations, mostly with only one 50-cycle ac circuit. These units operated at 22 v. $\pm$ 2 v. above ground with a 200-ohm resistance, and at less than 65 v. with an 800-ohm resistance. The breakers were installed because using them was less expensive than arguing interminably with an authority.

But the manufacturers used no special grounding devices for portable tools, and there were no serious results. I presume Hardy's system is nominally at 250 v. line to neutral. This requires care where local labor is concerned, since fatalities at less than 220 v. were not uncommon during my sojourn in India.

During a 5-year period I kept a careful record of troubles for a group of public utilities in the U. S., extend-

ing from Maine to Florida and as far west as Michigan. There were only two occasions where poor grounding caused serious results.

If U. S. technique "is way behind current British practice," one wonders why the additional equipment would be justified here. A separate earth-leakage trip would be required for each portable-device circuit to localize the fault area, while with one grounded lead a fault is at once apparent.

C. O. VON DANNENBERG

Brooklyn, N. Y.

Right You Are . . .

IN "HAND SURFACING," March, page 115, Fig. 9 states that magnetic blow happens with ac. In welding shop I learned that "arc blow" occurs only with dc. What's the right answer?

J. S. MILLER

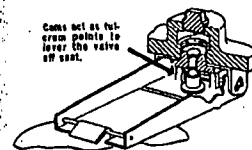
Seattle, Wash.

EDITOR'S NOTE: You are right. We meant to say "If you have arc blow, correct by using ac."

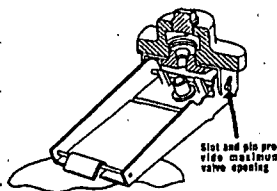
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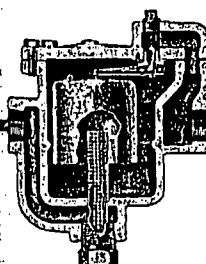
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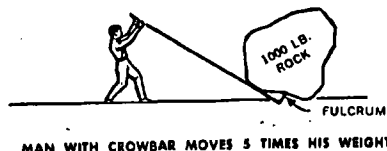


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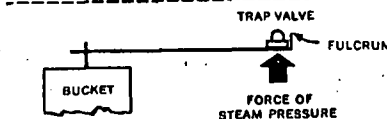


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