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**GENERAL ELECTRIC BUILDS AN
INCREDIBLE 'MACHINE MAN'**

He's 18 ft. tall,
walks & works like a man,
can lift up to 8,000 pounds!



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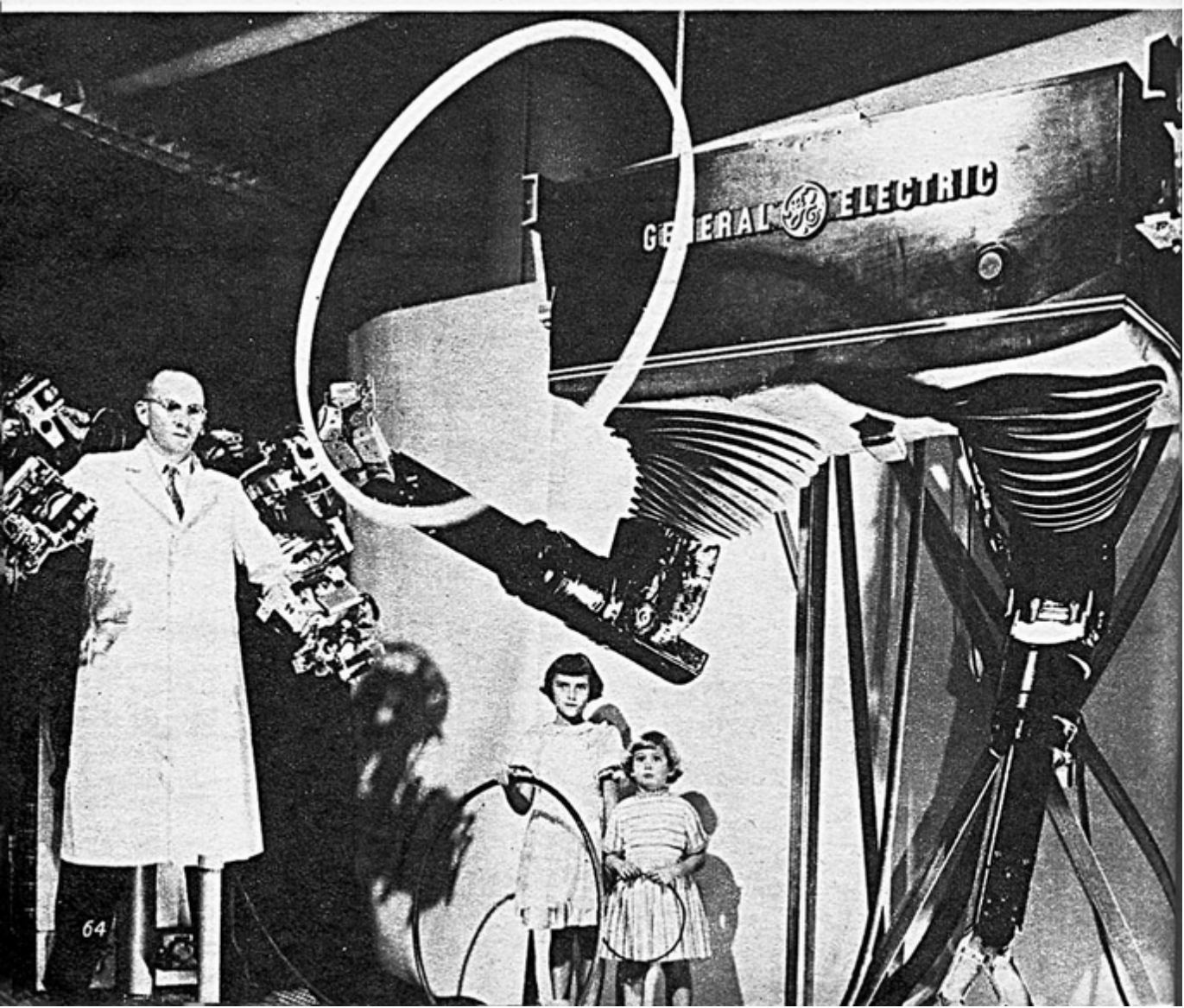
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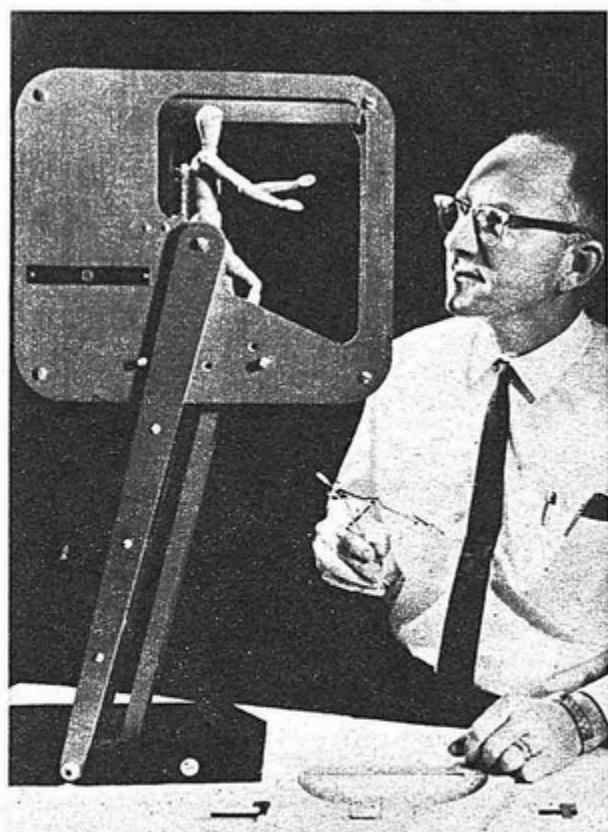


COVER STORY

GENERAL ELECTRIC'S MACHINE MAN

This incredible 18-foot tall steel skeleton with a man inside will be able to lift up to 8,000 pounds!





THE incredible machine man, now being developed by General Electric under an Army contract, will be able to stride effortlessly through swamps, step over cars or carry telephone poles up mountains as easily as if the poles were matchsticks.

The machine, known as the pedipulator, will walk and work like a man, and be capable of lifting up to 8,000 pounds. Inside, in a control harness linking his arms and legs with those of the machine, a human operator will manipulate the 18-foot steel skeleton as if it were a part of his own body. Through the control linkages, the machine will sense each movement of the operator and imitate them.

If the man moves his left foot, it will do the same. If he raises his right foot to step over a fallen tree, so will the machine. Should he lean over, it will too.

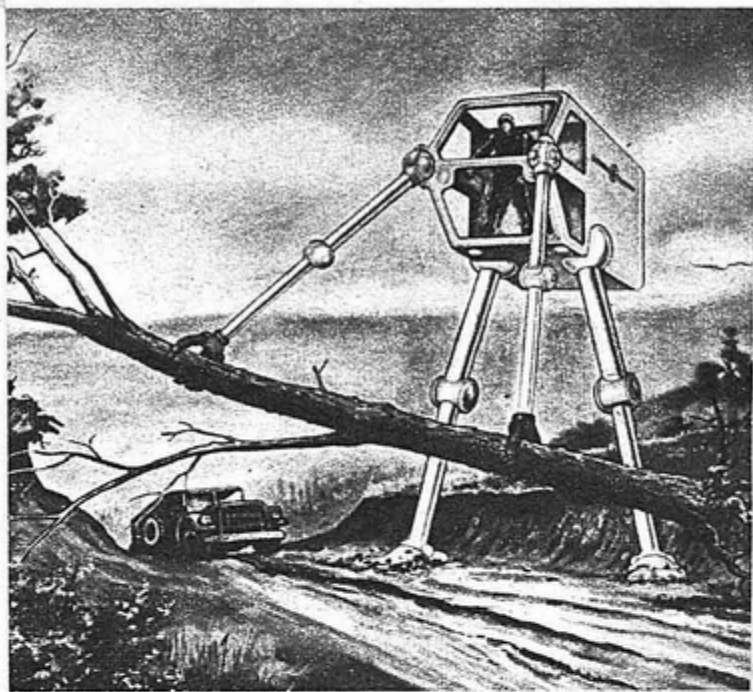
The machine man will respond instantly to each movement and at the same time reflect a proportion

of the energy it exerts to perform its work. This "force feedback" can be adjusted so the operator feels only as much of the actual effort as he wants. If a tree weighs 500 pounds, the man can adjust the ratio so he will feel only 50 pounds.

GE engineers expect to complete a full-scale but abridged model of the machine man by February. This first model, with its "legs" fastened to the ground, will be used in forward-backward balancing tests, which the engineers think will be the most critical.

Ralph S. Mosher, mechanical engineer for GE and innovator of machine man says that the basic concept has already been demonstrated successfully in the Handyman, a pair of mechanical arms and hands devised six years ago.

If the first version works, GE will build a model that will move just like a man. •



HANDYMAN, left, twirls hula hoop in agility demonstration by its inventor, GE engineer Ralph S. Mosher. Operator stands in master control harness, goes through same motions he wants Handyman to perform. Top of this page, Mosher works on mock-up of machine man GE will build in next five months. Above, how the machine man may look clearing road after storm.