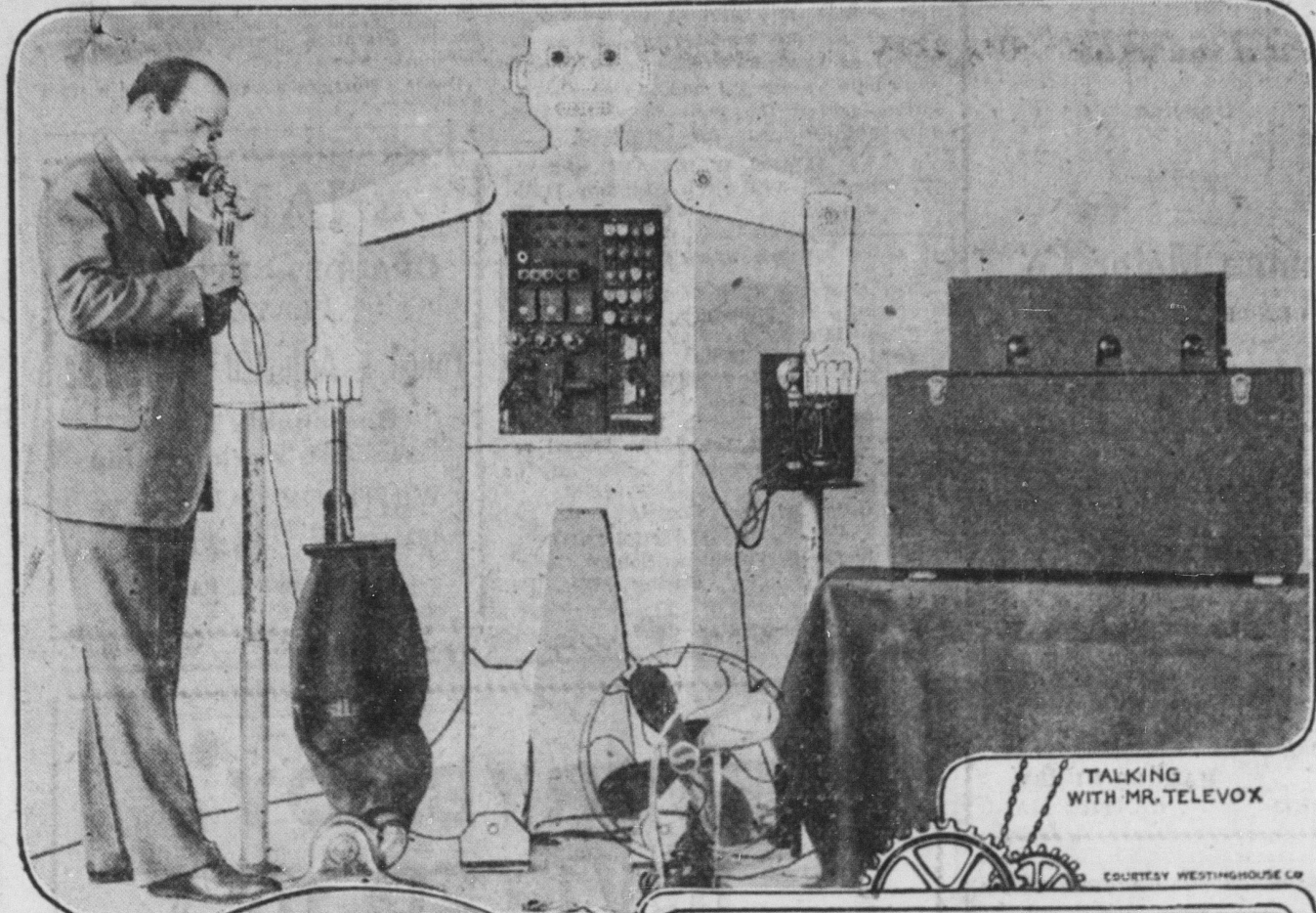


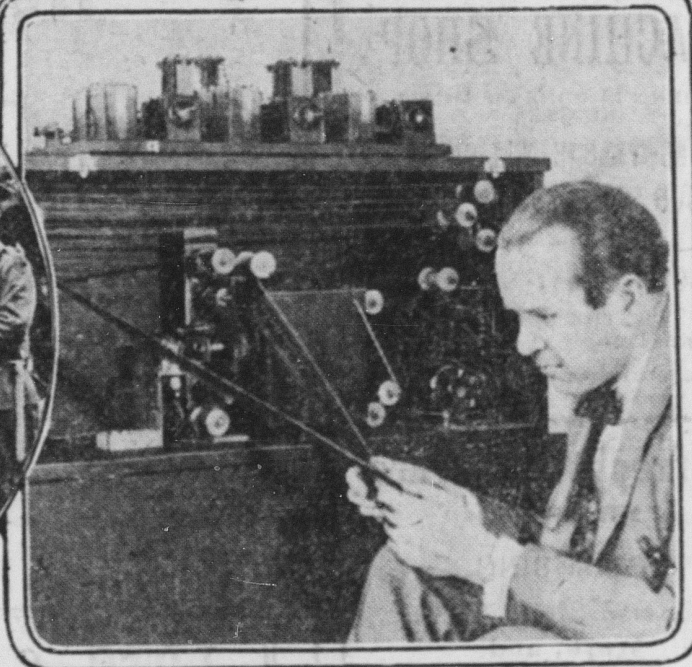
# Meet Mr. Televox, the Mechanical Man!



TALKING WITH MR. TELEVOX



MR. TELEVOX, THE DRILLMASTER



MR. TELEVOX'S LARYNX

By ELMO SCOTT WATSON

HERE is an old story about a man who went to a circus, and when he saw a giraffe for the first time in his life, exclaimed: "There ain't no such animal."

A few years ago, if you had told the average American that there could be developed a mechanical "man" of steel and iron who could be told to perform certain tasks and would do them, his reply would probably be similar to the exclamation of the old fellow who saw his first giraffe. And yet the ingenuity of an American inventor has developed such a man, but what is more remarkable still is the fact that he has given his automaton a "voice," and it can now "talk back!"

When Mr. Wensley first brought his mechanical "man" into being, all that "he" could do was to obey certain commands to accomplish certain specified results. "He" could be called upon the telephone and would open and close switches and record the condition of instruments or mechanisms with which "he" was connected. But now Mr. Wensley has given him a "larynx," and the process can be reversed, so that if a report becomes necessary "Mr. Televox's" mechanical arm lifts the receiver of a telephone and his "voice" says "This is Televox calling Main 6100." After the telephone connection is made, the "conversation" (albeit a prearranged one) is continued until certain information is conveyed.

As to how "Mr. Televox" has "found his voice," it can best be explained in the words of Mr. Wensley himself, who says:

To give the mechanism means for emitting articulate speech of good quality, use is made of developments in the "talking movie" industry. A piece of moving picture film about 15 or 20 feet long is spliced to make an endless loop. In the present model two sentences are spoken. These are photographed near the two edges of the standard film, the rest of it being left blank. The sound appears in the form of closely spaced lines of various shades and widths and frequency. Individual lamps with special straight filament are arranged with lenses to concentrate the light on a very nar-

row portion of the film at any one time. A small motor drives the film whenever the voice is required. A selecting mechanism in the televox lights either one of the two lamps depending upon the sentence desired. The image of the filament is projected through a narrow slot onto the speech record through which it passes to a photo-cell. A photocell passes current directly in proportion to the amount of light falling on it. As the lines on the film pass in front of the light, the corresponding change of currents which take place in the photo-cell are amplified through a special shielded three stage amplifier to a volume sufficient to operate a small loud speaker. This speaker is placed in front of the telephone transmitter and is heard by the person at the other end of the telephone line exactly as though a human being were speaking the words into the transmitter.

When a call is put through to a station equipped with a Televox having this voice attachment, the person at the remote end will hear a voice saying, "Televox speaking at Randolph 6400." This will repeat a second time and if the proper signal is not given by means of whistles or other musical devices, the Televox will then hang up the receiver upon the assumption that the call is a wrong number call. In

the meantime the person at the distant end has heard the number of the telephone to which he has been connected and should it be a wrong number, will be able to hang up and signal the operator again to get the correct number. However, should the dispatcher as indicated by the telephone number, he blows a blast on the proper whistle and the voice ceases and the machine is then in condition for further operation by means of the whistle notes.

Should a circuit breaker open automatically, the Televox is put into action and lifts the receiver of the telephone and immediately begins saying at intervals, "This is the Televox calling for Main 5600." This will be continued at intervals until the central operator is able to complete the connection to the dispatcher's telephone. As soon as he hears this voice, he will stop it by a blast of the proper whistle and then proceed to question the machine by further whistles as to what has happened. The answers to these questions will be in the buzzer code which the dispatcher understands.

As soon as the whistle stops the voice, the motor is also stopped and the lamps extinguished so that the film is in use only a very short time. While the usefulness of "Mr. Televox" is at present restricted to operation in the field of telephony, this newest development has great significance. For, as Mr. Wensley says, "The addition of this automatic voice considerably broadens the possible field of application for the Televox. It is not limited to the speaking of the two sentences but may be made to answer quite a number of questions correctly when necessary for such answers has been determined in advance. For instance, where it is not desired to use code signals indicating the amount of water in the reservoir, this mechanism can be made to state the height of water in feet, or it can be made to say that machine is cool or a machine is hot, or a machine is dangerously hot. It can be made to repeat any sort of routine report that can be selected by electrical circuits."

Considering what has already been accomplished in the development of this automaton, it would be a rash person indeed who would venture to predict now what the future limitations in other fields of usefulness for "Mr. Televox" and his "children" will be. For, more and more, we are learning how foolish is any declaration of "it can't be done!" when American inventive genius sets about to prove that it can, no matter what "it" may be.

## Early Coffee Houses

The first coffee house in London was established in 1652. Sir Henry Blunt is sometimes called the father of the English coffee houses. They were political institutions during the reign of the Stuarts. In 1675 Charles issued a proclamation for the suppression of them, but it was recalled ten days later. They became the meeting places of statesmen, wits, merchants, and fashionable idlers. They did much

to quicken and enlarge the mental life of the town. In 1708 there were nearly 3,000 of them in London alone. The coffee house resembled the modern club, but was less expensive, less exclusive, and not so luxurious. Some of the popular coffee houses were, "The Cheshire Cheese," a favorite of Samuel Johnson; "St. James," the center of political news and discussion; "Button's," where Addison dined and spent five or six hours a day. Every coffee house had its circle of wits and great men.

## Obeded Orders Strictly

The new maid was not all that could be desired. "Don't forget," her mistress warned her before her first dinner party, "coffee is served after everything."

"Yes, ma'am, I understand," replied the girl. And during dinner she served coffee after the soup, after the fish, after the meat and after the vegetables, as well as after the dessert.—Western Christian Advocate.

Each mind has its own method.

## "Honor System" Pleases Farmer

### More Loyal to Marketing Bodies Than "Ironclad" Contracts.

Co-operative marketing organizations of farmers throughout the country are rapidly dropping the so-called ironclad contracts by which their members have been bound in the past and are adopting an "honor system" which will allow farmers to withdraw from membership at will.

This is the extensive movement revealed by Fred Wilmarth, marketing expert, in an article written for the Farm Journal. Mr. Wilmarth in a nation-wide survey has found that 50 co-operative associations now favor the plan which will allow members to withdraw at will, as against 20 that present objections.

He predicts that the "co-ops" will grow stronger both in loyalty and membership in the future with the obligatory membership clause abolished than under the plan which bound the members to abide by the organization's rules for periods of from five to seven years.

### Compulsion Irritates Members.

Such outstanding organizations as the California Fruit Growers and the Dairymen's league are among those who feel that the co-operative plan is now so firmly established that compulsory membership of dissatisfied members will be more a hindrance than an aid in the future, he points out.

"It must be admitted that the binding feature presented a powerful appeal in the organization period of many co-operatives," says Mr. Wilmarth. "The idea of making the other fellow 'stick' went over with a bang. Then, too, it gave the new organizations a certain air of permanency that was doubtless of value in the beginning. But as an instrument to actually bind members to deliver their product it hasn't worked according to specifications."

"I believe it will be borne out by most of those connected with the now-operating associations that the member who is delivering his product is doing it because he wants to and because he believes in co-operative marketing, rather than because he feels he'll be sued if he doesn't deliver. American Trait.

"This is peculiarly an American trait. We do what we want to do, and it riles us to be told that we have to do anything. Contracts are necessary, to be sure. But the idea of forcing members to stick to their organization by threat of court action is of little effect."

"Neither can it be argued longer that the 'ironclad' feature is necessary to establish the permanency of the co-operatives," his Farm Journal article concludes. "Those that are in successful operation are successful through plain business merit."

## Best Breeding Age for Heifers Used in Dairy

The age at which the heifer should come into milk depends somewhat on the breed to which she belongs and the rapidity of development of the individual. In all herds there are some heifers which mature more slowly than others, and it is well to postpone breeding of backward animals two or three months.

Production of milk has an important influence on growth and development, and too early breeding is apt to result in underize, and this in turn is reflected in the productive ability of the animal.

Normally developed animals should be bred at the following ages:

Holsteins	.....18 to 21 months
Ayrshires	.....18 to 21 months
Guernseys	.....17 to 19 months
Jerseys	.....15 to 17 months

These figures are based on a study of the production records of the cows in the herd of the University of Missouri, and further information on Ayrshire cattle contained in Maryland Station Bulletin 217.

## Agricultural Squibs

It is more important to plant when the land is right than when the moon is right.

Sweet clover has no equal as a combined soil building, weed fighting, pasture and hay crop.

If killed at an early stage, weeds have not the opportunity to sap the ground of moisture and plant nutrients.

The secret of weed control in the vegetable garden and with other cultivated crops is to destroy these pests while they are young.

The careless manner in which barnyard manure is often handled suggests that its value as a fertilizer and the manner in which it deteriorates when exposed to leaching and fermentation are not fully appreciated.

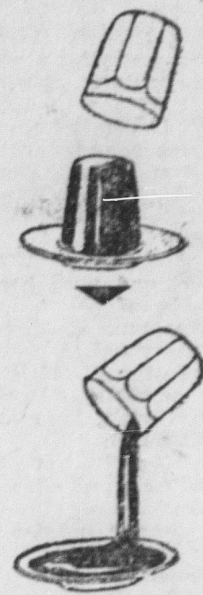
Much of the alfalfa hay produced is of low quality due to a large percentage of the leaves being lost. Most of the leaves may be saved if the hay is raked into small windrows as soon as possible after the leaves have wilted and the curing completed in the windrows rather than in the swath.

## PEXEL is the quickest way to get jelly like this

PEXEL will surprise you with its speed in making jelly jell. It never fails. What's more, repays 30c it costs—more jelly because it cuts down boiling time, saves fuel. Fruit juice, sugar and flavor aren't boiled off as by the old-fashioned way. Jelly sets as soon as it cools.

PEXEL is a 100% pure-fruit product. Tasteless, colorless, odorless. A powder, not a liquid. Keeps indefinitely.

Get PEXEL at your grocer's. Recipe booklet with complete recipes and accurate tables in each package. 30c. The PEXEL Company, Chicago, Ill.



never this

### His Regular Purchase

Blinks—Ever buy anything at a rummage sale?

Jinks—Huh? I have to buy my Sunday trousers back from one every time our church gives one.

Jack Sprat, who was so fat, Complained to his wife, so lean;

"I cannot get to sleep at night,"

Said she, "That's plainly seen.

You tramp about the whole night long

And keep the house awake.

Why don't you try some SALICON?

It's just what you should take."

SALICON is just what a great many nervous people should take. It induces natural, restful sleep; yet it is not a dope; and of course, it is a well-known fact that SALICON does not affect the heart nor upset the stomach.

## BEST for the Complexion

The beauty of Glenn's is the beauty it brings to the complexion—soft, smooth, clear white skin, free of pimples, blackheads or other blemishes.

Glenn's Sulphur Soap

Contains 35% Pure Sulphur. At Druggists.

## Allen's Foot-Ease

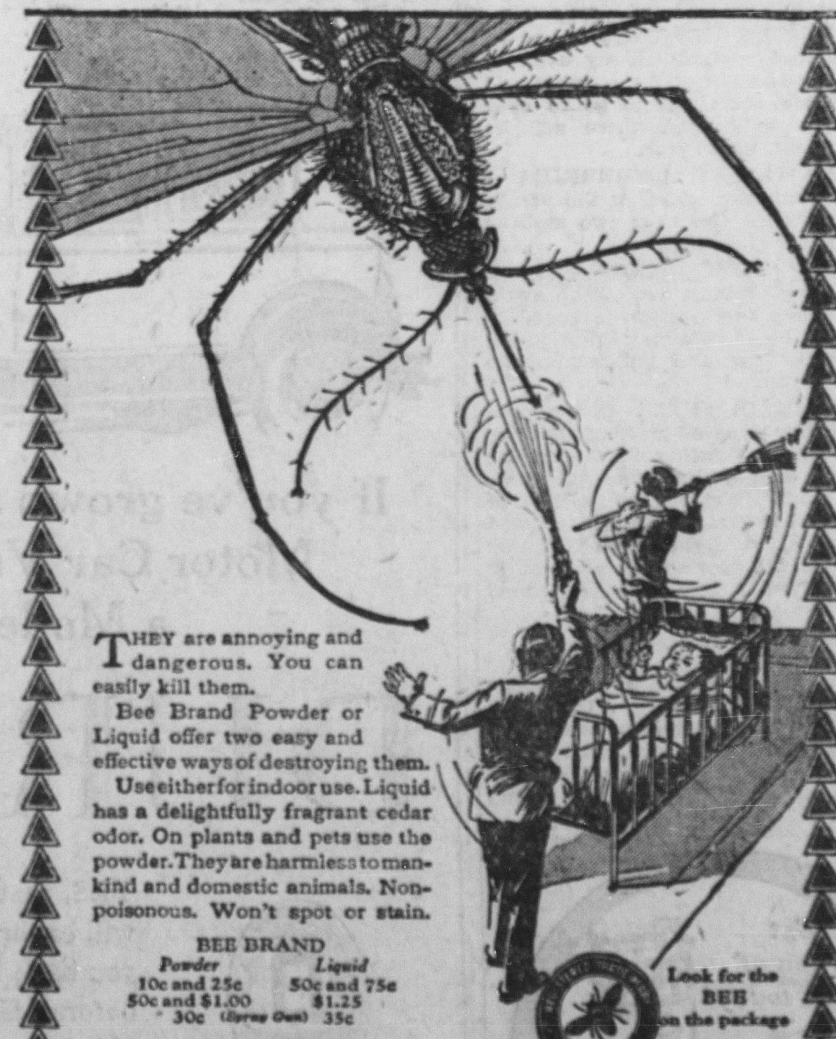
For Tired Feet It Can't Be Beat

At night when your feet are tired, sore and swollen from much walking or dancing, sprinkle two ALLEN'S FOOT-EASE powders in the foot-bath, gently rub the sore and inflamed parts and relief is like magic. Shake Allen's Foot-Ease into your shoes in the morning and walk all day in comfort. It takes the friction from the shoe. For FREE Sample address, ALLEN'S FOOT-EASE, Le Roy, N. Y.



Friction from the shoe. For FREE Sample address, ALLEN'S FOOT-EASE, Le Roy, N. Y.

## Kill the Poisonous Mosquito!



THEY are annoying and dangerous. You can easily kill them.

Bee Brand Powder or Liquid offer two easy and effective ways of destroying them. Use either for indoor use. Liquid has a delightfully fragrant cedar odor. On plants and pets use the powder. They are harmless to mankind and domestic animals. Non-poisonous. Won't spot or stain.

BEE BRAND Powder 10c and 25c Liquid 50c and 75c 50c and \$1.00 30c (three 50c) 35c

If your dealer cannot supply—write us. Insect booklet sent upon request. McCormick & Co., Baltimore, Md.

-it kills them!

Bee Brand INSECT POWDER OR LIQUID CEDAR ODOR

Look for the BEE on the package