

SCHOOL STUDY SPORTS

THE JUNIOR BRITISH WHIG

BIGGEST LITTLE PAPER IN THE WORLD

HUMOR PLAY WORK

THE SWIMMING CLASS—LESSON V

By JACK GIMON

The Man Who Taught One Thousand New Orleans Boys and Girls How to Swim

The crawl, used by practically every speed swimmer, and looked upon by experts as the only logical racing stroke, is naturally appealing to most young swimmers.

That until you have mastered it, you cannot consider yourself a good swimmer.

It is the most difficult of all strokes, but the speed it develops, its grace and its general utility put it on such a high plane as to make it well worth any difficulty you might have in mastering it.

The stroke consists of an abbreviated double overarm movement, very similar to that of the trudgeon, explained last week, and a peculiar leg drive learned from the natives of the South Sea Islands.

The only difference between the trudgeon and the crawl arm movements is that in the crawl the arms are bent at the elbows a trifle more than in the trudgeon, and they come down in the water alternately at the sides, rather than in front of the head.

The leg drive is radically different from any other stroke, however, and is known as the flutter kick. It is a continuous up and down alternate thrash of the legs from the knee down.

To learn the leg drive, lie flat in

the water at the edge of the pool, so that you can support yourself with your hands. With your legs straight back and forth, start moving them relaxed; the ankles loiter, and the whole movement coming solely from the knees. Do not bend the knees too much, and hold them close together. The feet should never be opened more than 12 inches from the heel to toe. When you do it correctly, your feet should be churning the water, not splashing it. The crawl swimmer leaves a little wake behind him, something like that of a powerful motor boat.

After you have practiced it holding to a support, point your arms above your head, lie flat in the water, face the leg drive alone. Then gradually take a couple of strokes, and a couple more.

The real difficulty of the crawl is in learning how to combine the arm movement and leg drive into a smooth stroke. It is a matter of practice, alone. Arms and legs work independently. You can use a fast flutter, or a slow arm movement, or you can swim the crawl exactly alike, and you will get a style of your own with practice.

In swimming the crawl, keep flat on your face, and do not let your

body roll. Breathe every other stroke, the same as in the trudgeon, except when you are sprinting, when you take breath only every four or six strokes.

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THE SHORT STORY, JR.

The Judge

ERRY PARKS and me last week I cracked a window pane. He got away, but I got hauled back into jail again. I been there once before, you know. They caught me swiping lead.

I hated being caged like that. You feel like you was dead. But all the fellows in our gang had been to jail, you see, and used to boast about it, too. A-lookin' down on me.

This time I kind of funny thing—Cop took me in a room. A sort of nice and sunny place. And quiet as a tomb. A desk was 'cross one end of it, at which there sat a guy with graying hair and funny smile, vice versa, if you wish. No two per- and you will get a style of your own with practice.

The cop says, "Judge, I brought the kid."

And then he beat it quick. While I was left alone in there, A-watchin' for a trick.

This guy he tells me how he'll help me get a chance once more; He didn't think they ought to treat me like they did before.

He talked so sort of friendly-like, And kind of took my part. He told me all 'bout what a time He had to get a jail for it. And you could see that he was just A boy himself at heart.

And—well, I've chucked the gang for good. I'm back in school again, And we're such friends, you see, Most glad I cracked that pane.

RADIO EXPLAINED

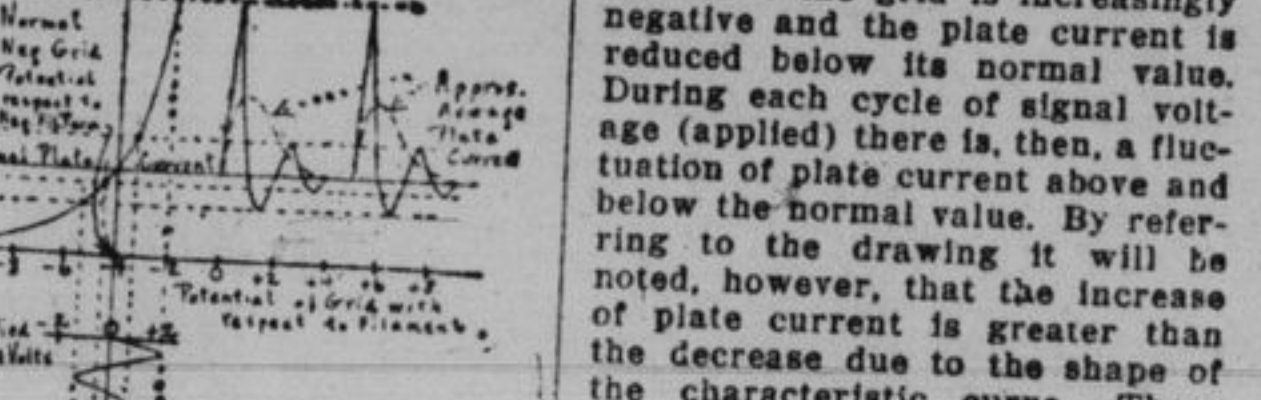
By E. H. LEWIS INSTRUCTOR NEW YORK, Y.M.C.A. RADIO SCHOOL

SIMPLE DETECTION IN A VACUUM TUBE CIRCUIT.

(Continued)

It has been pointed out that when an alternating (or oscillatory) signal voltage is applied to a tube whose normal grid potential is zero, the plate current decreases more on the average than it increases. The result, then, during a train of damped oscillations in the antenna is a pulse of current reduction in the plate circuit.

This pulse of reduction allows the diaphragms of the telephone receivers to be released and attracted and makes one click. There are 1,000 wave trains per



potential, is positive, a grid current flows, which damps the signal energy and decreases the sharpness of tuning. It would be a good plan, therefore, to never allow the grid to become positive.

Suppose that a certain normal negative potential is applied to the grid by a grid battery. The plate current has a certain value depending upon filament current, plate potential and this normal negative grid potential. This can be called the normal plate current.

Then assume that the signal voltage applied to the grid is at no time greater than the normal negative grid potential. When the applied voltage is positive the potential of the grid becomes less negative (negative minus a certain positive), and the plate current increases a certain amount above its normal value. When the applied voltage is negative the potential of the grid is increasingly negative and the plate current is reduced below its normal value.

During each cycle of signal voltage (applied) there is, then, a fluctuation of plate current above and below the normal value. By referring to the drawing it will be noted, however, that the increase of plate current is greater than the decrease due to the shape of the characteristic curve. There is, then, a pulse of average plate current above normal value for each wave train, and the response in the telephone receiver depends upon the wave train frequency.

In the previous article the tube was seen to operate actually as a rectifier. In the present case, however, there is no rectification, since there is at no time any grid current flowing. Due to the pulses of plate current being in only one direction, there is, however, apparent rectification of the alternations above and below the normal plate current value, and the effect in the telephone receivers is practically the same.

When the grid potential, with respect to the filament (actual grid

second there are 1,000 clicks or vibrations of the receiver diaphragms each second, which produces a certain musical tone. Starting and stopping of the wave trains at the transmitter then produces starting and stopping of the musical buzzes in the telephones, and signaling can be accomplished in a telegraphic code.

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Matrimonial Shrinkage. It was a well-known writer of verse, to whom a lady said: "I have just seen your wife for the first time since your marriage; but I had supposed she was a taller woman. She seems shorter than when I saw her last."

"Certainly," said the writer, solemnly. "She has married and settled down."

Paging Doggie. The hotel manager jumped on a bell-boy for whistling in the lobby. "Don't you know that it is against the rules for an employee to whistle while 'on duty'?" he demanded sternly. "Ain't whistling, sir," protested the boy. "I'm paging Mrs. Rich. It is well to take counsel of one's plow."

ANSWER TO YESTERDAY'S PUZZLE IS: BACON POTATOES MARION sewed the name of her favorite author in this quilt. WHAT IS IT?

MARKET PRICES table listing various goods like Wheat, Corn, Flour, and their prices.

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MARKET PRICES table listing various goods like Hay, Eggs, and their prices.

MARKET PRICES table listing various goods like Beef, Pork, and their prices.

MARKET PRICES table listing various goods like Hides and Wool, and their prices.

MARKET PRICES table listing various goods like GENERAL TRADE, Butter, and their prices.

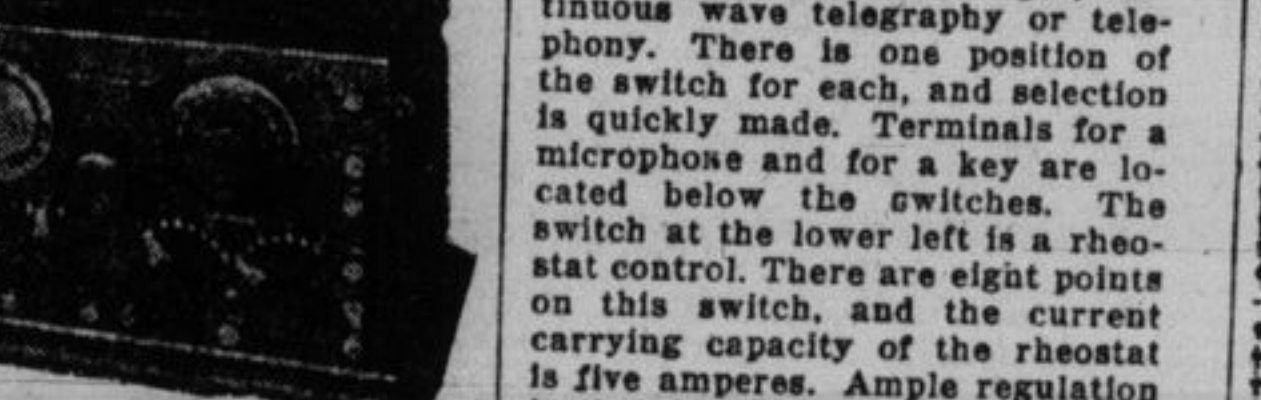
MARKET PRICES table listing various goods like Eggs, Spring Chickens, and their prices.

APPARATUS AND DEVICES

By RALPH BROWN, RADIO ENGINEER

A LOW POWER TELEPHONE TRANSMITTING SET.

The radio telephone transmitter illustrated is of low power, but has covered some very remarkable ranges. It can be successfully used for transmitting a capacity of .0025 to 400 microfarads and resistance up to 50 ohms.



below this stabilizer are two switches, one being a plate inductance control and the other a wave length switch. The wave length switch has seven points, and any seven of seven wave lengths between 160 and 325 meters may be used for transmission.

The panel is of formica, with a grain finish; metal parts are all highly nickel plated and the case is of heavy, cast, quartered oak, with a rubbed finish. The lettering is engraved and filled with white. The case has a hinged top, which provides easy access to the interior. All terminals are plainly marked for quick and easy connection.

Will readers interested in these radio articles kindly communicate with the editor by mail?

\$1.25; Port Hope, \$1; St. Thomas, \$1.75 to \$2; Woodstock, \$1.60. Loose Hay, Belleville, \$26 to \$27; Brantford, \$16 to \$18; Chatham, \$18; Hamilton, \$18; Kingston, \$28; London, \$15 to \$18; Peterboro, \$26 to \$28; Port Hope, \$20; St. Thomas, \$18 to \$20; Woodstock, \$17.

Wheat, Belleville, \$1.20; Brantford, \$1.20; Cobourg, \$1.05; Chatham, \$1.35; Hamilton, \$1.45; Kingston, \$1.15 to \$1.25; London, \$1.35 to \$1.40; Peterboro, \$1.30; Port Hope, \$1.40; St. Thomas, \$1.40; Woodstock, \$1.30.

Oats, Belleville, 65; Brantford, 52; Cobourg, 50; Chatham, 40 to 45; Hamilton, 47 to 50; Kingston, 55;

Diet Not Everything In Keeping Healthy

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