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DYED A SWEATER AND SKIRT WITH "DIAMOND DYES"

Every "Diamond Dyes" package the signals received.

There are audion bulbs made for this special purpose and if you use one of them you have what is called "one step of amplification." If you use two amplifying bu'bs, you have two steps, and so forth. Few amnteurs go beyond two operate a horn or phonograph.

The amplification will cost you about tell your druggist whether the makeful you wish to dye is wool or suited goods. For fifty-one years millions of women have been using "Diamond Dyes" to add years of the store to their old, shabby waists, strix, dresses, coats, sweaters, etockings, draperies, hangings, everything!—Advt.

String and increase the strength of the signals received.

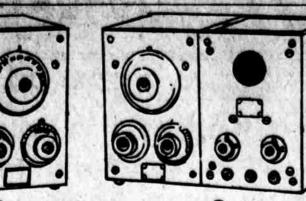
There are audion bulbs made for this special purpose and if you use one of the myou have what is called "one step of amplification." If you use two amplifying bu'bs, you have two steps, and so forth. Few amnteurs go beyond two operate a horn or phonograph.

The amplification will cost you about \$20 for each step.

The amplification will cost you about \$20 for cach step.

Just one word of caution. In pricing standard receiving outfits, remember that they are almost always sold without bulb, aerial outfit, storage buttery, "B" batteries or phones. Get the prices of these articles from this list without bulb, aerial outfit, storage buttery, "B" batteries or phones. Get the prices of these articles from this list. Noys, of East Orange, N. J., and add to the price of the set to estimate total cost. And, if you buy secretary, the Rev. Charles W. Cartimate total cost. And, if you buy secretary the Rev. Charles W. Cartimate total cost. And, if you buy secretary the Rev. Charles W. Cartimate total cost. And, if you buy secretary the Rev. Charles W. Cartimate total cost. And, if you buy secretary the Rev. Charles W. Cartimate total cost. And, if you buy secretary the Rev. Charles W. Cartimate total cost. And, if you buy secretary the Rev. Charles W. Cartimate total cost. And, if you buy secretary the Rev. Charles W. Cartimate total cost. A





coutfits. On left—apparatus used to "tune" signals. hooked up to unit which makes signals plainly sudible which makes them thirty or more times as strong

No. 4. What Will It Cost for a Set?

Perhaps the question of finances should have been the first one discussed in this series on radio. What, then, will it cost to install a radio set to receive these radio broadcasts?

The answer is necessarily indefinite.

Anywhere from \$5 to \$250. It will depend entirely on what you want to get and your location.

First, you will have to understand that there are two great general divisions among receiving sets. There is the type of set that uses a piece of mineral, or crystal, to receive through. There is the type of set that uses a specially designed incandescent light, known as an audion valve, or bulb, to receive through.

(Strawbridge & Clothler)

1:16 P. M.—Late news items from the Public Lisbona.

Afternoon concert at 4 P. M.—Blanche Kuth, soprano: Marguerite Croweil Barr. contraints: Hardle A. Simends. barrioss. Evening concert beginning at 7:36 P. M.—Alasten (WIF)

(Gimbel Brethers)

1:36 P. M.—Late news items from the Public Lisbona.

Afternoon concert at 4 P. M.—Blanche Countries. Evening concert beginning at 7:36 P. M.—Are proved and instrumental music.

Philadelphia Station (WIF)

(Gimbel Brethers)

1:36 P. M.—Classical and popular music principles of the direction of Raymond Steen.

2:30 P. M.—Latest popular dance hips on the proved and instrumental music.

Philadelphia Station (WIF)

(Gimbel Brethers)

The bulb is by all odds the most efficient—from thirty to several hundred times as efficient. That is to say, insert first a crystal and then a bulb in the same station and the bulb will make the phones give out signals so much louder that there can be no comparison. And the bulb will enable you to hear stations that would not make the slightest sound through the piece of mineral.

There is another aspect of this. Most people who install a radio set want one that will do away with the phones and give the music and speech through a horn, known as a "loud speaker," or one of those phonograph attachments which make your standard box serve as loud speaker. loud speaker.

It is to be understood in the first place that any one who wants such results must positively use the bulb type of receiver. The crystal type cannot be used with a loud speaker with any satisfaction. Why, then, you will ask, bother about the crystal type at

Here is just a list of the necessi-

Two variometers, \$10.

Two varioble condenser, \$5.

Grid condenser, fifty cents.

Phones, \$6.

bulb, \$15.

Dry cells for "B" battery, \$2.50.

Bulb socket, \$1.

Bulb, \$5.

Rheostat, \$1.50.

To operate a loud speaking horn or phonograph, you will need what is known as "amplification." That means that you must attach apparatus to build up and increase the strength of the signals received.

Today's Programs

Philadelphia Station (HFI) (Strawbridge & Clothier)

(Gimbel Breshers)

1.30—P. M.—Classical and popular music by the Gimbel Orchestra under the direction of Raymond Steen.

1.39 P. M.—Saxaphone solo, Vincent Guisini; accompanist. Raymond Steen.

2.30 P. M.—Latest popular dance hits on the talking machine; new device used for transmission insures perfect reproduction.

2.46 P. M.—Barticone solo, "Chip Off the Old Hock: "William H. Corner, S:18 P. M.—Fopular vocal selections, Carl Zochras; (a) "Carolins Rollins Stone"; (b) "Rock Me to Sleep in My Swance Cradle"; plano accompanist, Joseph Faber.

8:30 F. M.—Soprano solo, Mrs. Ella McCue: "Kiss Ms Again." Herbert; vielin obligato, Marian Doran, e:30 P. M.—News Items, courtesy Public Leposs.

4:85—Announcements. 7:05 P. M.—Final baseball scores via 7:05 P. M.—Final baseball scores via Radio.
7:15 P. M.—Bedtime stories for the kiddles: "The Adventures of Reddy Fox." Thornton W. Burgess, read by Uncle W. P. Will announce the names of all children writing in to him. T-80 P. M.—"Uncle W I P" will announce the names of all children writing in to him. T-80 P. M.—Mina Dolores will give a short recital. The following soprano solos, accompanist Mrs. Frances Babcock: 1—"Voice Sapete." from "Marriage of Figuro." Mosart: 2— The Little Gray Dove. Saart. B—"The Moon Drops Low." Cadman: 4—"Hopak." Moussorgsky.

Newark, N. J., Station (WJZ)

7 P. M.—"Jack Rabbit Stories," by David Corey, New York Evening Mail. 7:30 P. M.—"Sayings," by B. & L. Warranty.

746 P. M.—"Your Daily Marketing." by
May B. Van Aredale, associate professor
household arts, Teacher's College, Columbia

ask, bother about the crystal system of all?

Well, the crystal set has its uses. If you are within about five miles of a powerful broadcasting station and want the music and speech for yourself alone, a simple crystal set will answer as an amusement. If you are more than five miles away from the sending station, you might as well give up all thoughts of using a crystal detector.

Turning to the bulb type we strike the expense. For the simplest type of set, with only one buib, you will have to apend quite a tidy sum, even if you buy the parts separately and assemble the set yourself. There are certain things that are essential and they all cost money.

Amy B. Van Arrdale. associate professor household arts, Teacher's College, Columbia University.

May B. Van Arrdale. associate professor household arts, Teacher's College, Columbia University.

May B. Van Arrdale. associate professor household arts, Teacher's College, Columbia University.

S to 19:15 P. M.—Concert by the West Orange Community Orchestra. Wm. O. Arventive, Increase of the selection Dainty Daffodia. Wiles: "Walts, Aloho O." Lake; "La Casarine—Masurka, Alo

Here is just a list of the necessities with approximate prices. Pardon the technical names of the things; you needn't bother yet to learn what they mean; it is enough to know that you have to have them so as to get a general idea of the cost. This set is for the best "hook up" to receive the majority of broadcasting stations which send on a 360-meter wave length. It is known as the "regenerative set" and is by all means the most efficient for short waves, from 200 to 500 meters.

Your aerial apparatus will cost about \$5.

Vario-coupler, \$6.50.

Two variometers, \$10. Variable condenser, \$50.

Grid condenser, fifty cents.

Phones, \$6.

Six-volt storage battery to light the Six-volt storage battery to light the Sulb, \$15.

Dry cells for "B" battery, \$2.50.

Bulb socket, \$1.

Bulb, \$5.

Rheostat, \$1.50.

There's \$58 right there. But, renember that when you have it and it as hooked up and you get that first thrilling, awe-inspiring sound of a hu
General Receive Company.

Rheostat, \$1.50.

There's \$58 right there. But, remember that when you have it and it is hooked up and you get that first thrilling, awa-inspiring sound of a human voice coming from four or five hundred miles away, your \$58 will seem like a mighty small price to pay for one of the most wonderful sensations that modern science has given us.

Each Sunday night, with a set like this, I have listened to the actual services in a church 370 miles away, with four or five phones connected in the circuit.

To operate a loud speaking horn or phonograph, you will need what is known as "amplification." That means that you must attach apparatus to

"DRY" ACT INDORSED

Uncommon Sense: Good Brains Are Costly By JOHN BLAKE

Rockefeller, Carnegle, Schwab, Lord
Northcliffe—hundreds of other Englishmen and Americans—who from nothing at all made tremendous successes, had to have help to do what they did.

They never got cheap help. They got the best that was to be had, and always paid for it.

But they were insistent on having the best. And they paid no more than anybody else for the average brains which were also necessary to the building of their great establishments.

with, all the more reason for improving it.

You notice that racing men never spend great sums of money training in the money used to train well-bred and promising horses.

TF YOU can't go to college go to night school were you will find a fair equivalent a rechnical training is to be obtained. That will cost you time you may want to spend in amusement, but the time will be well spent.

VOU may not have a great industry, or a great newspaper, but you have at least got a career, and you have got to have a good brain to conduct it. That brain is probably your own, for we take it that you are not yet hir-ing the brains of others.

Very well. Don't be afraid to spend money on it. Give it the best training and education you can obtain, and regard every cent you devote to that as an investment that will pay big dividends by and by.

And in investments of that sort time training and in investments of that sort time training and investments of that sort time training the Sports Passe in the morphism of the sorts Passe in the morphism of the

BIG employers buy brains and are for that reason it ought to be spent just as lavishly. not afraid to pay well for them.

It is poor economy to buy poor better. If it was a good brain to begin with, all the more reason for improv-

to be obtained. That will cost you time you may want to spend in amusement, but the time will be well spent.

Perhaps you will be able to buy other brains after a while. Just at present yours is the only one which will do your work. Don't deny it the training it needs. The more money you spend on its education the bigger value you will get out of it by and by.

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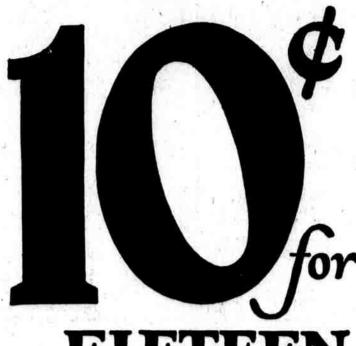
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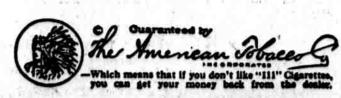
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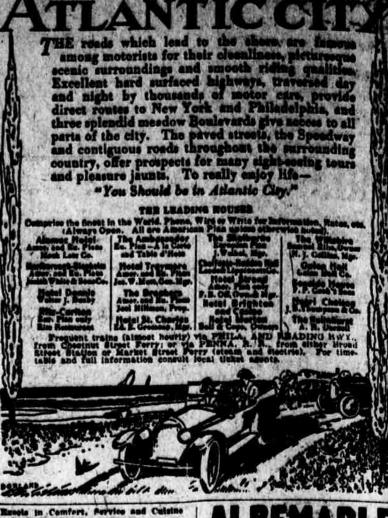
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