



A Sensitive Single Tube Receiver

By R. M. SHERRILL
(Radio Engineer)

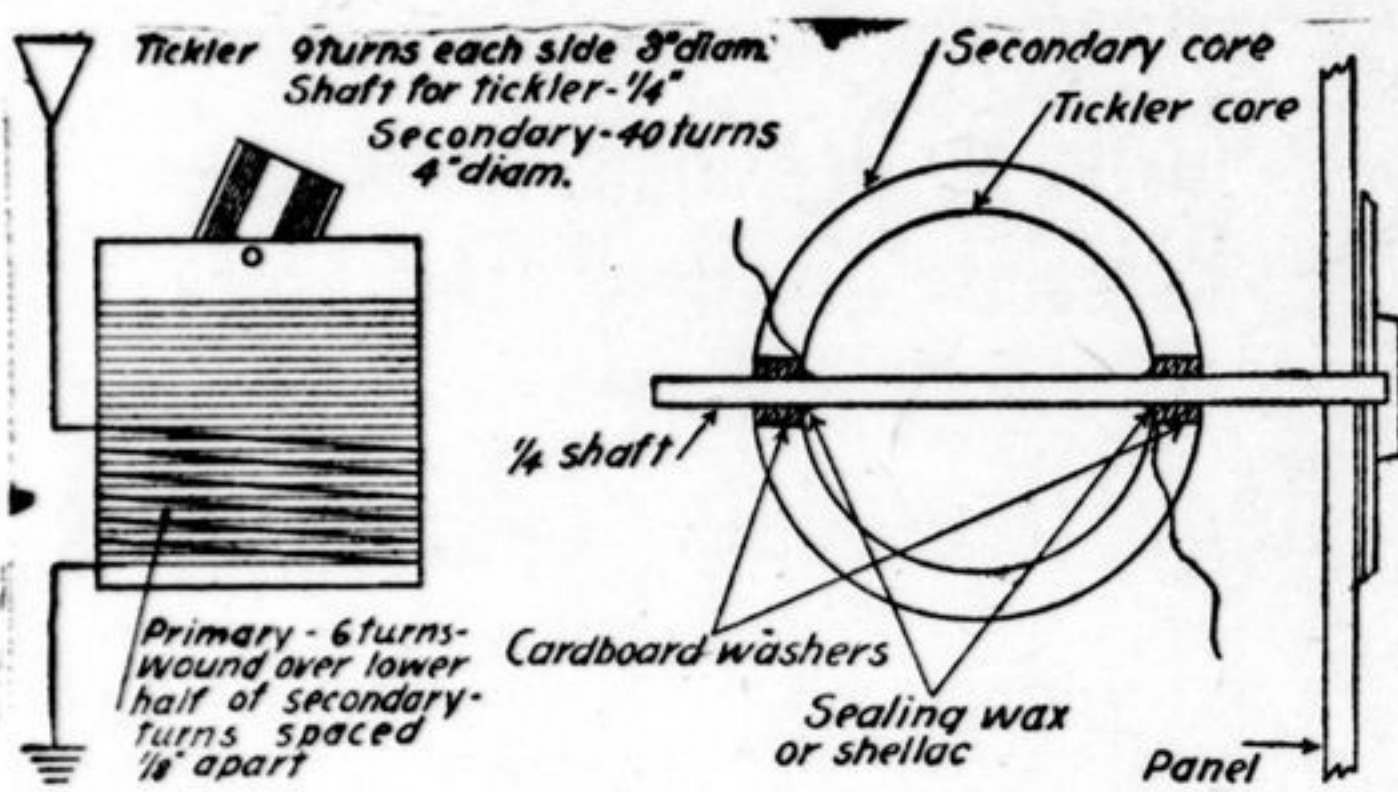
Part 2.

The results which may be obtained from the single tube receiver described last week, depend to quite an extent, upon the careful construction and mounting of the tuning coils.

The windings are made on thin cardboard tubes. These tubes, however, should be carefully prepared before they are wound. If the tubing is not thoroughly dry in the first place, it should be baked for an hour or so in a warm oven. When

turned parallel with the secondary winding—the lower turns of the tickler will be on the same level with the upper turns of the secondary.

A good way of doing this is to first make the tickler and its mounting, allowing the core of the secondary to furnish the bearings for the shaft. Then start the secondary winding at the proper distance from the top. When the windings are arranged in their final position



dry a very thin coat of shellac should be applied to both the inside and outside surfaces.

The Secondary Coil

The secondary coil, consisting of 40 turns of No. 22 DCC wire, is evenly wound on a cardboard core, 4 inches in diameter. A thin coat of shellac or collodion is next applied to hold the wire in place.

The primary winding, consisting of 6 turns of about No. 18 DCC wire, is wound directly on top of the secondary. The primary winding should be wound only on the lower half of the secondary, and the turns should be spaced at least 1/8 inch apart. It is not necessary that the primary and secondary be wound in the same direction.

The tickler coil consists of 18 turns of No. 22 DCC wire wound on a cardboard tube, 3 inches in diameter. This winding is arranged as shown in the diagram, so that there are 9 turns on each side. The space in the middle should be about 5/16 inches wide so as to allow a 1/4 inch shaft to go through the tubing.

The tickler coil is mounted so that it rotates inside of the upper end of the secondary. The height of the shaft must be arranged so that when the tickler winding is

behind a panel the tickler coil may be fastened to the shaft with shellac or sealing wax. Homemade washers of heavy cardboard may be used on the shaft to keep the rotor from striking the sides of the secondary tubing.

Use Flexible Leads

Connections to the tickler should be made with flexible leads which may hang loose over the top of the secondary. Good flexible leads for this purpose may be made by twisting together loosely about 6 pieces of No. 30 DCC wire. Scrape the insulation from the ends and twist them together and solder them.

The variable condenser is the main tuning adjustment and the tickler is used to bring the signal up to its maximum strength. It will be noted, when signals are being received, that turning the tickler in one direction will gradually make the signals louder until the tube starts to oscillate and distorts the signal. The proper adjustment is reached when the tickler is in the position just before that point at which the distortion starts.

Care should be taken in tuning with this circuit to keep it from oscillating. When oscillating, it will interfere with your neighbor's reception.

RADIO QUESTIONS AND ANSWERS

Mr. Sherrill will be glad to help you solve your radio problems. Write him, care of The Durham Chronicle.

A. T. Y. asks: "Is it possible to wire a set without the use of solder?"
Ans.—Try rearranging your aerial so that it will not be parallel with that of your neighbor.
A. R. T. asks: "My set does not work well at home but on a friend's aerial—using the same batteries—it functions perfectly. What can I do to make it work right at home?"
Ans.—Try reconstructing your aerial. Also, try different grounds. As your set seems to be all right, this should remedy the trouble.

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Traverston

(Our own correspondent.)
Miss Rebecca Banks of Toronto is at present visiting with her sister, Mrs. M. Smith.
Mr. and Mrs. Henry Moffat and son, Cecil of Edge Hill renewed acquaintances with their old neighbors the first of the week.
Miss Mayme Haley of Detroit is holidaying at the parental home.
Some of those who took in the Hanover Fair were Mr. and Mrs. G. E. Peart and sons, Miss Margaret Greenwood and Miss Myrtle McClocklin.
Miss Elizabeth Hughes of Hanover suburbs is spending a few days the guest of her friend, Miss Margaret Greenwood.
Mr. Charles Noble of the Queen City spent over the week-end at the Fallaise home.
Mrs. John O. Greenwood and family visited Egremont friends early in the week and viewed the scenery of Wilder's Lake.
Miss Amelia Blair left Monday

for Toronto where she will attend Normal school for the coming year. Mrs. T. E. Blair and Miss Edith Teeter accompanied her to the city.
Miss Myrtle McClocklin spent the latter part of the week at Welbeck with her sister, Mrs. Will Campbell.
Miss Jessie Macfarlane of Hamilton was a recent visitor in the neighborhood.
Mr. and Mrs. R. T. Cook and Miss Evelena of Detroit motored over on Saturday to the Cook home. Miss Jennie of Toronto has also been at the parental home the past week.
Mr. and Mrs. Henry Beaton, Master Raymond Wilson, and Mr. Fred Cook spent Sunday at Mr. G. E. Peart's.
The Class at the home of Mrs. M. J. Davis under the supervision of Miss Ruth Pirt, R. N. is progressing very favorably with an average attendance of fourteen.
We congratulate Mr. James Ellison on winning three first prizes on his fine team at the Hanover Fair.

Priceville

(Our own correspondent.)

In driving through the country these days one is forced to realize that winter is not far distant as leaves are taking on the golden tints and fall ploughing and stubble fields are evident everywhere.

Mr. Colin McLean is out with the threshing outfit again, and the sound of whistles is evident in different directions from here.

Congratulations to Mr. and Mrs. Archie McArthur, Townline, on the arrival of a little son this 23rd of September.

Fall fair season is on in earnest.—Dr. Carr managed to get two first prizes on his team at Hanover fair and is showing today at Thornbury and tomorrow at Walter's Falls. Our fair promises to be a bumper one as our secretary is busy these days recording entries, etc. Everybody keep October 2 and 3 dates open and come to a good fair.

W. G. Watson is raising a fine garage today on the home property on Kinross street.

G. A. Watson & Sons have the mill dam repaired and are getting a good head of water now. The dam is in better shape now than at any time since it was built.

The Memorial Committee has made a start on the erection of the steel fence around our memorial. The work will likely be completed this week and will be a marked improvement to the site.

Mr. H. Fleming is visiting with his sister, Mrs. F. G. Karstedt of the village.

South Bentinck

(Our own correspondent.)

Miss Rhena Charlton left last week for Toronto where she will spend a few months.

Miss Agnes McLean is spending a few holidays with friends in Hanover.

Mr. John Turnbull has returned to Guelph where he is attending High school.

Mr. and Mrs. James Kerr of Varnay, accompanied by Mr. and Mrs. W. Kerr of Grand Rapids, visited recently with Mr. and Mrs. William Derby, Jr.

Miss Daisy Mather went to Stratford on Monday to enter the Normal school there.

Mr. and Mrs. James McDonald, Will and Margaret visited with friends in Mount Forest last week.

Mr. and Mrs. John Milligan spent an evening recently with the former's sister, Mrs. George Henderson of Hampden.

Allan Park

(Our own correspondent.)

The village was very quiet last Thursday and Friday as almost everyone was away to the Hanover exhibition. A good time was reported.

The road-making under management of Joseph Whiteman is progressing fine. They are now cutting the hill opposite Moses Donnelly's gate. When that mile and a quarter is finished it will no longer be the Allan Park hills but just mere grades.

Why is Andrew Park wearing such a smile? This is a question that comes before us daily. Some say on account of the good road which will soon be going past his gate. Others say he was trading horses, but we know why. A young son arrived Sunday morning. Congratulations, Mr. and Mrs. Park.

Congratulations also to Mr. and Mrs. John Bartman, a son being born there Monday morning. We are told that this makes a total of thirteen in the Bartman family. Eleven living.

Farmers report full granaries. Mrs. Kerr, Sr. is still bedfast but is holding her own wonderfully.

We are glad that a new station house has arrived at Allan Park on a flat car. It will be put to place at an early date and the other one removed.

TEN DAYS FOR DRIVING CAR WHILE INTOXICATED

Norman Bruder, a Guelph motorist, was sentenced to 10 days in the county jail by Magistrate Watt when convicted of driving a car while intoxicated. The charge was laid following an accident at the intersection of Victoria and Woolwich streets, when the car in which Bruder was driving struck a horse and buggy driven by Norton Harrison, of Guelph township, wrecking it and throwing Harrison out on to the pavement. Both vehicles were travelling north on Woolwich street when Bruder's automobile crashed into the rear of the horse-drawn vehicle.

Now that hairpins are obsolete how does a woman fix her watch?

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NEW TWO-DOLLAR-BILLS HAS PICTURE OF PRINCE

Have you seen the new two-dollar Dominion of Canada note? Although the date of issue is given as June 23, 1923, there are few who have seen the bill in circulation. A teller of one of the London, Ontario institutions recalls having handled the new issue as far back as three or four months ago, but they were by no means common. The appearance of the new bill is such as to compel immediate attention. A clean-cut picture of the Prince of Wales occupies a central position, formerly allocated to a large "2," while the figure denoting the denomination at the top of the bill is much enlarged. For the first time the maple leaf is included in the scheme of decoration, and the seal of the department of finance appears on the face. Altogether it is quite different from the old issue.

A BIT MIXED

(George Belcher in the Tatler.)
First Gentleman (to entire stranger): "Surely I've met you before."
Second Gentleman: "When?"
First Gentleman: "Didn't we meet in Quebec?"
Second Gentleman: "Never been there."
First Gentleman: "Funny; neither have I. Must have been two other men."

"My Wife Handles the Money"

The wife deposits

In a joint account

For the children, too

—so a business man writes us.
"She can do it better than I. Each pay day she always deposits our savings first. We never buy anything unless we have the cash to pay for it and each year our savings are growing."
A Joint Account in the name of husband and wife allows the wife to deposit or withdraw money during her husband's absence or when he cannot get to the bank during business hours.
A Savings Account for the children will teach them the value of keeping their money, thus helping them to form the habit of saving.

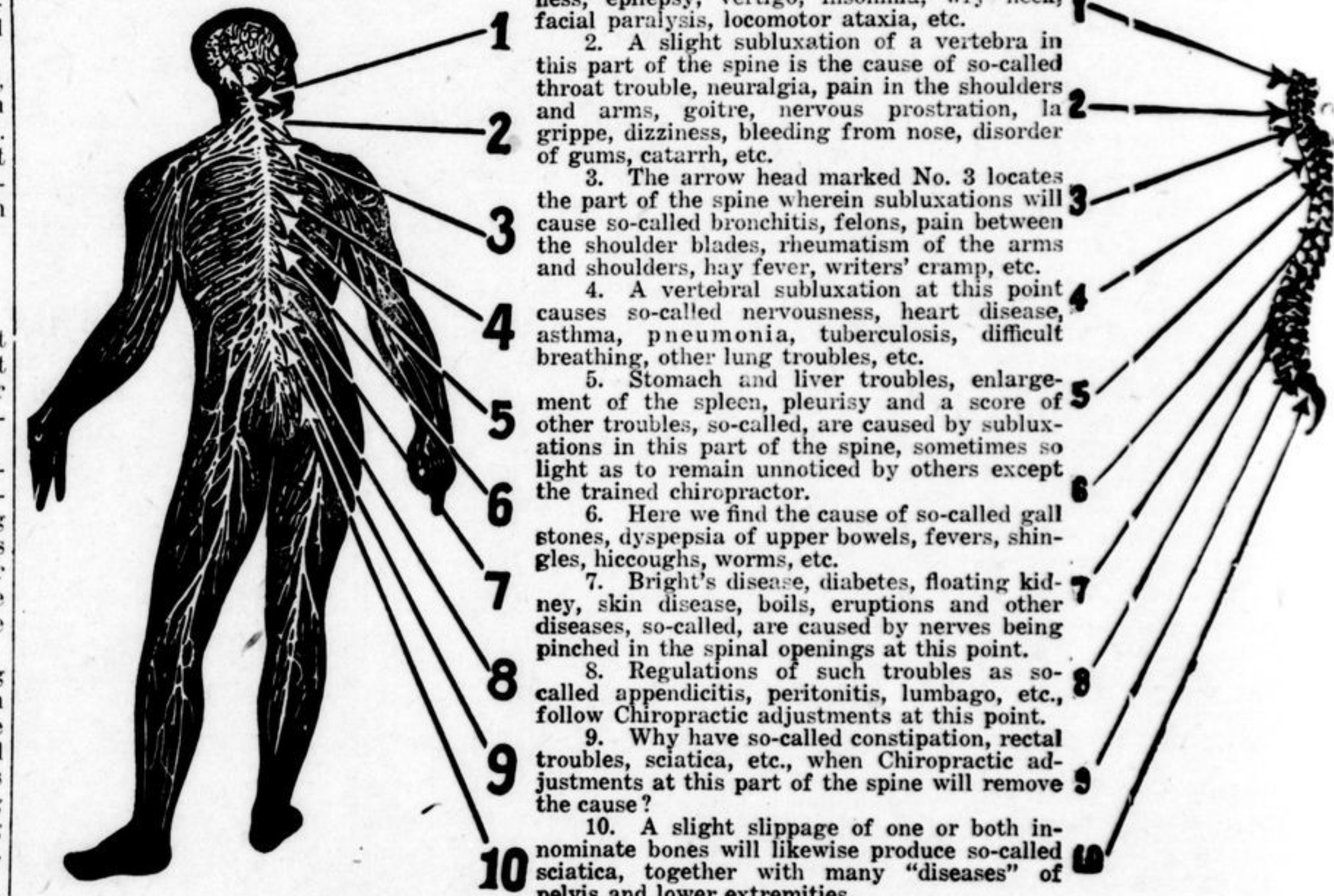
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Men's Heavy Coat Sweaters	\$4.98	White Swan Wheat Flakes	25c
Best Sport Flannels, 56 ins. wide per yard	\$1.79	Clark's Pork and Beans, small tin for	10c
Dark Flannelette, yard	25c	Fancy Corn or Peas, large tin	18c
All-linen Towelling, yard	15c	Best Corn Starch at	10c
Fancy Kimono Cloth, yard	39c	Best Japan Tea in bulk, 1/2 lb	33c
Sweater Yarn, each	18c		
Men's Fall Weight Wool Underwear, fine quality	\$1.39		

Men's No. 1 Heavy Work Shoes, per pair .. \$4.47
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CONTROL OF CORN BORER SIMPLE AND INEXPENSIVE

Post Extremely Bad in Michigan and Elgin This Year.—Should Protect Themselves

Ravages of the European borer have reached such proportions in both Middle Elgin counties that many are in danger of losing their corn crops this year. Elgin particularly hard hit. In some instances the borer has infested 75 per cent of the acreage. Growers are advised to stringent measures of control summarized as "cutting low, ensiling it, ploughing it, and burning it completely and sure that all corn gets into as early as possible."

Methods of Control

The methods of control are inexpensive and not good farm practices. To get idea of them it is necessary in mind that the borers over and remain until the May in any part of the crop above ground large enough to eat them; hence they will be in the stalks, stubble, cobs, remnants of the crop left field or elsewhere. They will be to some extent in stout growing among the corn, measures, therefore, consist in so treating these that they will be destroyed. If there is this is easy, for all that is then is to cut the crop low, plough the stubble completely and not drag it up when cultivating. The knives and fermentation of borers that go into the soil ploughing destroys all life field, provided everything beneath the surface.

If there is no silo or if it will not hold all the corn, is sometimes a little hard such cases the field must be thoroughly ploughed, a crop has been removed. In some method must be providing of the stalks and cobs. The best is to cut them through a cutting shredder, feed the cattle all eat, throw the remainder manure and haul this plough it up before the May. If for any reason are fed whole the urea should not be thrown out manure, but should be kept and burned. It is better to remnants than to plough, der, because it is hard them completely with the The great point to keep it that no stalks, pieces of even cobs, should be left ground, in the field or elsewhere in the barn or the anywhere else. Moreover, ing or ploughing must be by the end of May, for the borers will change into around and lay their eggs.

Plays Great Part

Ploughing down of the and other corn remnants great part in the control borers, but to be effective ploughed under must not up again when cultivating but must be left buried; are dragged up many escape destruction. The of the field should not be a toothed implement.

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