



Edison Storage B Batteries

(Part Two)

By R. M. SHERRILL (Radio Engineer)

For the sake of convenience in handling and charging, it is suggested that the storage B batteries be made up into two 48-volt units. The following data is given for the construction of one of these units, and as many may be made up as desired.

A Positive and Negative Take care to see that there is one positive and one negative element in each cell. After the elements are in the tubes, thin strips of mica 1/2x6 inches should be worked down between each pair of elements to separate them. The cells may now be filled to 1/2 inch of the top with the electrolyte which is made as follows: Dissolve 1 lb. and 7 oz. of Potassium Hydroxide (sticks) in 5 pints of water. It is preferable to use distilled water for this purpose. The above proportions will provide enough electrolyte for two of the 48-volt units. Be sure to keep the solution away

EDISON STORAGE B BATTERY

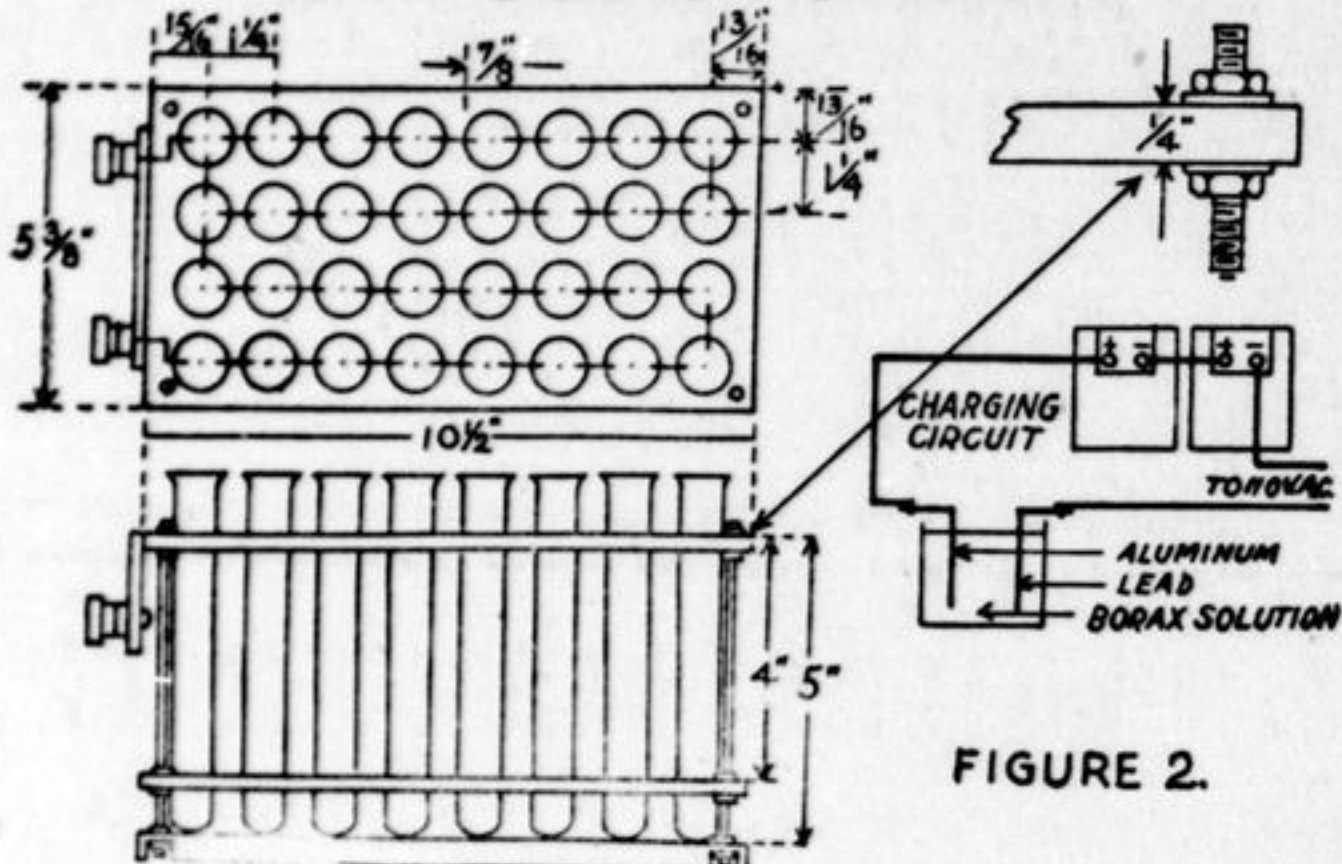


FIGURE 2.

The corner supports for the racks are 5 1/2-inch lengths of brass rod with an 8-32 thread. Nuts and washers screwed tightly down against the top and bottom sides of the racks hold them in the positions shown in the diagram. A 2 1/2-inch strip of rubber panel screwed to the front end of the top rack provides a place for mounting the binding posts.

After the tubes have been filled with the electrolyte, a 1/4-inch layer of paraffine oil should be poured on top of the solution in each test tube. This oil prevents the solution from evaporating too rapidly and also prevents it from splashing out when the battery is being charged.

RADIO QUESTIONS AND ANSWERS

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

V. A. R. says: "My receiver uses 6250 tubes for two stages of radio frequency amplification. I am using 135 volts on the plates. Is this voltage likely to damage the tubes?"

All of the connections, batteries, etc., are apparently O.K. The tubes have been tested in a neighbor's set and found to be in good condition. Sometimes the signals come in loud or if I touch the primary binding posts of the amplifying transformer with my fingers. How can I locate my exact trouble?"

C. D. P. has the following trouble: "The signals from my receiver have suddenly become very weak except when I plug in on the detector tube. Am using a two-stage amplifier, and

From your description, it is probable that the first transformer has an open circuit in it. Disconnect the transformer and test each winding separately with a battery and headphones.

THE GARBAGE EDITOR

(Chesley Enterprise) David Campbell, editor of that vile rag known as Jack Canuck, was sentenced to six months in jail for contempt of court by Justice Orde. The Jack Canuck Publishing Company of Toronto was also fined \$1,000 for its comments on the same case in which alimony had to be paid.

such a sewer sheet as Jack Canuck or the Calgary Eye-Opener. Robert Edwards, who edited the Eye-Opener which was of the same low order as Jack Canuck, if not a little dirtier, was elected a member of the Alberta Legislature by the roughneck element of Calgary and died while in office.

Thirty-two years ago a discredited and drunken publisher in Stratford attempted to edit the Chesley Free Press which was started in opposition to the Enterprise along the same garbage lines as Jack Canuck, but this clean community wouldn't stand for filthy literature, and the paper was compelled to sell its plant. As far as goodwill was concerned, it hadn't any. Of all business or professional offices where a man of pure thinking and right living should be at its head, none are so important as the editorial sanctum.

Following is a story which appeared in the "Methodist Recorder," and it will be taken as an example of either unconscious or subconscious wit:

As a certain well-known Free Church preacher delivered a fervent sermon on social evils, he came to the matter of alcoholic liquor, and remarked: "If I had anything to do with whisky, beer, rum or any intoxicating drinks, I should have them all thrown into the river." In a few minutes, he announced the closing hymn which had been chosen by the choir-master. It was, "Shall we gather at the river?"

O.T.A.—AND SOME FACTS

The following, from the December 30 issue of The Kingston Standard, is well worth reading. The views expressed should be well weighed, especially by temperance people as The Standard is one of Ontario's front rank temperance dailies:

Many people believe, and believe sincerely that the Ontario Temperance Act is now working most satisfactorily and producing highly beneficial results. Many other people believe, with equal sincerity, that the Act is working quite to the contrary and that, while superficially there is less drinking than in times past, if the real facts were known, it would be found that there is just as much drinking as ever and that, beyond this, there has sprung up in the land a great body of men who are wantonly and deliberately violating the law, and, inducing others to do likewise, are encouraging a disrespect for law and laws generally.

"Not unnaturally it is extremely difficult to arrive at the real facts of the case, but in the last few days, some revelations in respect of the open sale of liquor have been made that must give all of us pause. We refer, needless to say, to the astounding and almost unbelievable fact that in the two days before Christmas, the sales of liquor at the vendor's establishment in Kingston ran to the enormous total of over \$10,000—much of it for Kingston consumption. What this means he who runs may read, since it signifies, estimatedly, the sale of liquor at 10 cents a single drink as it was before the bars were happily abolished for all time, in this one city represents the equivalent of 100,000 drinks, or about four and one-half drinks for every man, woman and child in the city of Kingston. Properly to realize what this means, it should suffice to say that in the days of the open bar, it is very much to be doubted if all the saloons in Kingston combined would sell as much liquor in an entire month as was sold in these two single days immediately preceding Christmas.

That of itself is sufficiently alarming and disquieting, but when we remember that not a single drop of liquor thus recently sold was sold as liquor, but, rather, was sold as "medicine" under doctor's prescriptions, the monstrous farce of the whole thing is apparent on the surface. Does any one suppose for an instant that this was a genuine "medicinal" demand—that of a sudden, we have become a community of invalids and sick people in dire need of stimulants to bolster up our failing strength and our drooping spirits? If any there be who really hold to this view, we can assure them there is nothing to it, for we have it from Dr. A. R. B. Williamson, the medical health officer of the city—and his profession and standing in the profession cannot be questioned—that the health of the city and of the neighboring districts at the present time is exceptionally good and that we are singularly and happily free from any ailments or diseases.

"The conclusion, therefore, is as irresistible as it is inevitable that this "medicinal" fiction is indeed fiction and that a great part—by far the largest part—of the liquor sold just before Christmas was obtained not for the purpose of succoring the weak, the stricken and the sick, but simply and solely as Christmas 'cheer'.

"Now, this of itself is bad enough, but when we emphasize that every bottle of liquor so sold went into the homes of the people who purchased it, we can begin to appreciate the menace and the danger of such a development, since it means that home-drinking, which in many cases is secret drinking, must be steadily on the increase and that by that very token there is a grave danger in its use in this direction. When beyond this, we realize that there are still many well-filled 'cellars' in our midst and that the illicit sale of liquor goes on apace, we can perhaps begin to get a vague idea of the enormous consumption of liquor that is going on in this 'Dry Province of the Dominion.

"It is to be borne in mind, too, that the great bulk of this liquor was hard liquor, and that, relatively speaking, there was little demand for beer or wine. Thus, it would seem, our people are developing a taste for hard liquors—the most in-

sidious and dangerous kind of drinking and chiefly responsible for inebriety and all that goes with it. This, perhaps, explains in a measure at least, why it is that since Prohibition went into force, there has grown up in Ontario, at Corbyville, the largest distillery in the British Empire.

"Yet further: only the other day we published in these columns the figures showing the number of 'Home Brew' permits that have been issued in the various Provinces of the Dominion. These showed, as we then pointed out—the figures are official—almost three times as many permits in this 'Dry' Province as in all the other Provinces put together, and the better to emphasize this we publish these permit figures as follows:

Table with 2 columns: Province and Number of Permits. Ontario: 27,558; Quebec: 2,852; Nova Scotia: 1,501; Prince Edward Island: 130; New Brunswick: 209; Manitoba: 114; Saskatchewan: 3,658; Alberta: 865; British Columbia: 664; Yukon: 5; Total: 37,558.

"That is to say, of a total of 37,558 such permits in the entire Dominion, Ontario has the unenviable distinction of leading the way with the enormous total of 27,558, leaving less than 10,000 for all the rest of the Dominion. And this, be it understood, is the story only of "legalized" permits. If the same ratio holds as to illicit stills in the Province, the showing would of course be infinitely worse.

"If now we turn to another phase of the situation and refer to the figures of convictions for crimes, drunkenness, etc., as furnished by the Department of Trade and Commerce of the Dominion for the year 1923, we are confronted with still other disquieting facts. For instance the total convictions for crime in 1913 in all the courts of the Dominion, except Ontario, were 114,339; for 1923, they were 85,046, a decrease of 26 per cent. In Ontario alone in 1913 the convictions for crime were 58,799; in 1923 they were 74,207, an increase of 26 per cent. If we reduce these figures to a per capita basis, we find that in 1923 the total convictions for all Canada, excluding Ontario, were 1,453 per 100,000 population, while in Ontario they were 2,530 per 100,000 population.

"Coming now to the figures for drunkenness, it appears that the convictions for this offence for all Canada, except Ontario, in 1913 were 44,739, while in 1923 they were 14,195, a decrease of 68 per cent. In Ontario the convictions in 1913 for drunkenness were 16,236, while in 1923 they were 11,370, a decrease of 30 per cent. Again reducing this to a per capita basis, the figures are: for all Canada, except Ontario, convictions for drunkenness in 1923 were 242 per 100,000 of population, while in Ontario, the convictions were 388 for 100,000 of population—this, as Mr. J. A. V. Preston of Orangeville points out in a recent letter to the press, as compared with 204 convictions for drunkenness per 100,000 in England, where prohibition is unknown—and after eight years in Ontario under the Ontario Temperance Act!

"We shall not endeavor to draw any conclusions from these figures, preferring to let others do that. But in all earnestness and in all sincerity and as a staunch believer in Temperance and the Cause of Temperance, we may be excused if we ask the simple question, "Are these figures satisfying to the Temperance people of Ontario, and do they still think that the Ontario Temperance Act is the last work in Temperance?" We do not know what their answer will be, but in view of all the figures which we have presented above, we feel that the matter is one which should engage their most serious attention—and, indeed—the attention of the Government at Toronto, since it would appear that we are having Temperance in name rather than in fact.

"For itself The Standard has always believed that the sanest, the

safest and the most efficacious Temperance Act Ontario has ever had was that put through by Sir James Whitney, carrying with it the three-fifths repeal clause. Under this Act, and with a vigorous educational campaign persistently at work coming a really Temperance Province and a really temperance people. It was this growing sentiment, indeed, that paved the way so easily for the abolition of the bar—thank God, for all time.

"Whether we are better off now under the present Act than if we had gradually continued our policy of education and uplift is a question. The figures that we present here, with rather pointed other way, but, point as they may, this one fact is unmistakable that the present Ontario Temperance Act in the opinion of many thoughtful people, is by no means the last work in Temperance, and the sooner the real friends of Temperance recognize this, and devise ways and means to overcome the present serious evils, the better for the people of the Province and the better for the Cause itself."

CHURCH UNIONISTS MAY LOOSE PROPERTY

Anti-Claim Two-Thirds Majority Is Necessary. — Case Now Before Courts.

That all of the Presbyterian congregations in Ontario which have voted for church union by less than a two-thirds vote may find themselves devoid of all their property was the statement made Thursday of last week by Rev. James Mackay, prime figure in the anti-union fight in the London presbytery. This property, he declared, would then pass into the hands of the "continuing church." It is also stated that churches making a decision without the regulation vote will be considered as undecided.

Should this turn out to be the case, there are only a few congregations throughout the entire province which have yet voted on the question that will be able to take their property with them into the union. In London only Knox Church would be affected by the two-thirds vote basis. The South London congregation entered the union by a vote which was 17 less than the two-thirds majority, and as a result, it may come about that although the congregation of Knox will enter the union, it cannot take any of the property or funds with it.

In view of the contention of the anti leaders, St. Paul's Church may be considered as having not decided on what action to take, although it unanimously agreed to enter the merger without a vote. A vote of two weeks is compulsory under the church union bill, it is claimed, and the St. Paul's congregation did not reach a decision under the bill and has not legally decided the question either way.

"There has been no legislation passed by the Provincial House on church union at all," declares Rev.

Mr. Mackay, "and these congregations which have voted to enter the union don't know what they have voted for. The Provincial House will probably follow the lines of the imperial legislation and make a two-thirds vote necessary before any property can enter the union. In this case these congregations that have not carried the union question by the two-thirds vote cannot take their property with them, and it will remain with us."

Writ Before Courts

Mr. Mackay declared that it was for this purpose that the present anti-union writ was before the courts of Ontario.

"They have ridiculed our writ and said it was just bluff, but they will find where the bluff is when the provincial legislation is passed," he declares. "Of course, the writ is only pending now. It can't be executed when there is nothing to act upon, but just as soon as the legislation is passed, should it fail to provide for the two-thirds vote, the writ will be exercised."

He also states that he does not see how the House can do anything else but provide for the two-thirds vote aspect, pointing out that this was decidedly the trend of the members when the matter was considered before.

"They were basing the measure on the imperial legislation, and the House has certainly not changed since then," he asserts.

As further incentive to the House to fashion its legislation after the imperial measure, Rev. Mr. Mackay says the percentage of votes in favor of union will have a great effect.

"There will be over 50 per cent of the members of the church in Ontario vote against the union, and the House must look on the voice of the majority as a mandate and will undoubtedly follow their wishes."

Mr. Mackay, speaking of the future of the "continuing church," refers to activities in the west. A message has been received from Regina to the effect that a Presbyterian Church was to be continued in that city and will have a membership of at least 500. Committees have been formed there to effect permanent organization and steps taken to appoint four provisional presbyteries in Saskatchewan.

RADIO QUESTIONS AND ANSWERS advertisement for Stromberg-Carlson Sets, The Golden Tube Contact Set, The Nightingale, HORSE & CUTTER FOR HIRE, General Repairing, Saws Gummed, SKATES SHARPENED, Durham Machine Shop, F. W. MOON, MACHINIST.

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