

The Tech

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IN CHARGE THIS ISSUE

Carole A. Clarke '21 Charles W. Manville '22

WEDNESDAY, AUGUST 27, 1919

HELPING STUDENT ENGINEERS

Plans of a New Movement of American Society of Mechanical Engineers

PRESIDENT IRA N. HOLLIS of the Worcester Polytechnic Institute, as acting chairman of the committee on relations with colleges of the American Society of Mechanical Engineers, has submitted to the council of the society a report suggesting a remedy for what it terms "the ineffectiveness of our relations with colleges due to lack of a definite program, a failure in co-ordination between the parent society and the student branches and a resultant reliance upon the initiative of a few individuals whose interest fluctuates from year to year."

The report has been accepted by the council and the task of carrying out the recommendations has been given to President Hollis, and it is probable that funds will be made available for the purpose.

The recommendations as adopted by the council include the following:

Scholarships and Loans

The society shall issue every spring a syllabus or suggestion of some one subject or subjects for consideration for the following year.

The authorization of 10 scholarships, not to exceed \$200 each, to be awarded under rules prepared and administered by the committee on relations with colleges.

The setting aside of a fund to be invested in loans for deserving students, to be administered by the committee.

A student who has done the most effective work in a student branch in his senior year may be elected to a junior membership in the society upon graduation by the student branch and that the society remit the initiation fee and dues for the first year.

For sake of comparison of the activities of the student branches at present and those that will be carried out under the new program, the committee's analysis of the present is of interest, as follows: To get outside lecturers on technical and non-technical subjects. To get salesmen or agents from manufacturers to describe their product, usually illustrating with a stereopticon. To obtain lecturers on general subjects from members of the general faculty with which the engineering department is connected. To encourage students to speak on their feet in public meetings by giving them periodicals and books to be revised orally: by having the results of theses, investigations and technical work conducted by the students described: by the delivery of brief addresses on non-technical subjects. To broaden the contact with engineering by joint meetings with other branches of engineering in the student engineering society. To bring students together, mainly for social purposes and for making them acquainted with the A. S. M. E. and its usefulness to them personally. To teach initiative by non-interference in the student branches, thus leaving to them all activities outside the classroom.

Suggesting Topics for Engineering Study

These are all to be commended, the report states. By way, however, of a suggested list of topics (such as contemplated under the proposed by-laws) the following may be enumerated as well worthy today of consideration by the student branch:

1. The general effect of the peace conference and the league of nations upon the work of the engineer, especially in commercial life of the nation during the next generation.

2. The method by which war disorganizes industries and the work of reconstruction that invariably follows every war. The general reconstruction that must follow this war in all the belligerent countries.

3. Standardization for manufacture and the effect of this war in forcing engineers and manufacturers to reduce the number of parts and to simplify construction of all kinds of machines. Standardization for guns and munitions.

ANENT OUR "MR. SMITH"

Apropos of the latest \$4,000,000 gift of our munificent "Mr. Smith," who still remains shrouded in mystery, the Boston Post in the morning edition of August 23, comments editorially as follows:

"Mr. Smith" Again

When the Institute of Technology stands in especial need of money for one purpose or another, she has only to call upon the really existent but preternaturally shrinking "Mr. Smith," and the thing is already nearly done. So with the projected \$19,000,000 that the institution wants as a total for its new endowment fund. Mr. Smith arises to remark—invisibly and inaudibly however—that he will turn in \$4,000,000 of that sum if other people will donate an equal amount on or before the beginning of the new year.

Harvard has just set out to raise a fund of approximately the same generous proportions. After a while and from many sources she will get it, of course. But lucky "Tech" merely taps "Mr. Smith" and the stream of money comes forth at once. Smiths are very numerous in the world, but this particular kind of Smith is as rare as he is helpful to the great school across the Charles. May his tribe increase.

MAXIM '86 AGAINST RADIO BAN

(Continued from page 1)

in Washington. These students have served their country as hundreds of other amateurs have, by operating radio stations on both land and sea in the past two years when their aid alone solved the problem of radio operators for the government service. Many of these young men gave up time in their Institute curriculum at a period when they most needed it, and gave themselves over to the government for whatever service they could render. Even at the present time several Institute students are in charge of German stations with the Army of Occupation. More stirring than all is the utmost sacrifice, which many of our amateurs have made, stretching wires across No Man's Land or performing some equally hazardous deed for Uncle Sam.

Canada has recognized the work of the amateur and has gladly given them full sway in their field of experimentation. In spite of the fact that the Harvard Radio School and similar places were almost entirely made up of men who had had previous radio training in the amateur world, the Navy Department seeks to subdue the inventive and experimental aspirations of thousands of young men by attempts at adverse legislation.

The present uncertain and dangerous condition of affairs was brought about by the transfer of the radio jurisdiction from the Department of Commerce to the Navy Department at the time of the entrance of this country into the war. Previous to this transference, radio inspectors were placed over various districts, into which the country was divided, to control the radio communication, to give examinations, and to issue licenses. Under this system and by the aid of certain reasonable restrictions, the amateurs were well controlled and yet given sufficient leeway to do all desirable communicating and experimenting. When the Navy Department was given control, all amateur stations were closed and ordered dismantled. Almost instantaneously the amateurs heartily accepted this ruling, wishing to co-operate in any way to aid the American Government to win the war.

Early in the spring of this year, the Navy Department attempted to secure

legislation which was to put this body in permanent control of all radio in the United States, both amateur and commercial, and it was plainly their intentions to once and for all wipe the amateur from the face of America. This was the appreciation shown for the service given the government in the past war. The bill, proposed by a Mr. Alexander, was overwhelmingly defeated, after hundreds of electrical experimenters had fought against it in the capitol city. So convincing were the arguments of Mr. Maxim, who led the protest, and others, that in the end even the originator of the bill voted against it. At that time hundreds of protests from amateurs were received by the Congressmen, showing that the opposition was not of a few men, but country-wide. This particular bill was known as House Bill No. 13159 and Senate Bill No. 5306.

After this effectual protest, the Navy Department removed the ban on receiving April 15, but no mention was made at the time when the transmitting restrictions would be withdrawn. In the middle of July, an unofficial order was announced that these restrictions would remain in effect until a state of peace was declared by the President. This latest movement has given many amateurs concern lest the Navy Department will again make an attempt to gain permanent control over radio communication; and as a result, another campaign is being waged by the American Radio Relay League to have the ban removed without delay. When it is removed, if such be the case, the amateurs will automatically go under control of the Department of Commerce as before the war.

Earlier in the year, the reason for this prolonged delay was given as fear that Bolshevik propaganda might be spread by means of radio, but that trouble is now non-existent. That the concern of the amateur is well founded is shown by the latest appeal of Secretary Daniels to Congress for a complete Government monopoly. In identical letters to Vice-President Marshall and to Speaker Gillett of the House, Secretary Daniels asserts that Government operation and control of all transoceanic and ship-to-shore wireless stations used for commercial purposes in this country is "necessary, on account of present interference between stations," and sets forth what the Navy Department regards as other cogent reasons why these important fields of radio telegraphy should be dealt with by the Federal Government as a natural monopoly.

The legislation sought by the Secretary of the Navy seeks legislation along these lines: (1) Study of radio problems within the United States by a special committee or commission; (2) authority for the President to establish bands of wave lengths for transoceanic and ship-to-shore services; (3) Government monopoly of transoceanic and international radio service; (4) authority for the navy to use immediately all navy radio stations for commercial or press business; (5) authority for the navy and other departments to aid in the development of American-owned radio stations abroad and the use by them of Government.

Secretary Daniels realized the need of good internal communicating systems such as can only be attained by careful organization, and believed that such a system can only be accomplished by Navy control. It is, however, an established fact that the American Radio Relay League, before the war, by means of its almost perfect organization, was able to transmit a radio message from the Atlantic to the Pacific Ocean, and get a reply back to the Atlantic without a single error, in the remarkable time of one hour and twenty minutes. To do the same thing by telegraph would mean not hours but

days, according to men closely concerned with this feat.

Mr. Daniels' chief opposition to the amateur is interference. Under the regulations of the Department of Commerce, the amateurs were restricted in both wavelength and power so as to be of minimum interference, and public opinion has been that if the Navy stations cannot work through this slight interference, as the commercial companies have been able to do, it shows a poorer stage of development for the Navy Department than the commercial companies possess. Not only is that true, but if the Navy can not work through an amateur, it can not well expect to work through an enemy signal in time of war, with its intended and unrestricted interference.

Secretary Daniels recommends actions as shown by his recent statement:

"(1) Either by a committee of Congress or by special designation of commission, authorize a comprehensive study of the problems in connection with radio within the United States.

(2) Authorization to the President to set aside by proclamation certain bands of wave lengths for ship-to-shore work, for short to aircraft, and for transoceanic service, in accordance with international conventions and demonstrated needs from time to time.

(3) Constituting ship-to-shore radio service a Government monopoly under the navy.

(4) Constituting transoceanic and international radio service a Government monopoly under the navy.

(5) Authorization for Navy Department to utilize immediately all navy radio stations for commercial and press business.

(6) Authorize the navy and other departments to assist American enterprise in the sale of radio apparatus and the development of American-owned radio stations abroad, and especially to authorize the Secretary of the Navy to authorize the use by American companies under patents and improvements to be paid for either in exchange of patent rights or in other suitable ways."

The head of the Navy Department also attributes the majority of the recent developments in radio to the Navy, and does not consider the great progress made by such men as John Hays Hammond with his wireless torpedo, Lee DeForest with the carbon ball, Powers of the American Radio Research Corporation and H. P. May of the A. R. R. L. Mr. Powers is not claims as the basis of his great successes the hours he spent at night experimenting in his back yard with home-made radio apparatus. Such men as these the Navy Department wishes to keep from developing into the radio engineers who will lead the way in the future.

With the purpose of preventing such legislation as will endanger the future life of the radio experimenter, the American Radio Relay League and its many subsidiary organizations have instituted a nation-wide campaign to hasten the reopening of transmission for the amateur by obtaining favorable legislation. To this end, the Technology Radio Society has requested every amateur and experimenter who has not already done so to appeal by personal letter to his Congressman in Washington that the ideals of democracy will be upheld in the radio game.

The Dansants

These Universally Popular Dances Have Been Resumed Daily at

The Brunswick

Music for Dancing in the Cafe from 4 until 9 P. M.

Music in the Egyptian Room from 6.30 until 12.30

This will prove pleasant news to dance-lovers

Hotel Lenox under same management

Dancing Daily From 9.30 to 12.30

L. C. PRIOR, Managing Director.

HIGH GRADE

Anthracite COAL

For Domestic Uses.

Our Crocker-Poehontas Bituminous Supplied to the Institute.

Burton - Furber Coal Co.

4. Conservation of national resources, including fuel, water, soil, forests and minerals.

5. Labor and the complete readjustment of society in order that employer and employee may live together in peace. Examples of the solution of problems in different manufacturing companies.

6. The problems of transportation, national and private ownership, and the changes consequent upon improvement and rapidity of transportation.

August 21, 1919.

--The Iron Age.

In President Hollis' report to the American Society of Mechanical Engineers we are glad to see that there is a tendency in the Engineering profession to bring about closer relations between the student engineers and the profession. We hope that all the professional societies at the Institute will do their part to bring about such relations. In the Electrical and Chemical courses the men are given an opportunity to get a better idea of the profession by taking the Xa or VIa courses, which give actual practice in engineering establishments. In the other courses, however, it is by means of the professional societies that an insight into the actual work of the profession can best be had. Much can be done by all our societies at the Institute to accomplish this ideal by a proper selection of speakers and trips of inspection. Next year will be a big year for the Institute. We hope that it will be a big one for the professional societies.