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**CREW STARTS TODAY**

(Continued from page 1)

The practice during the next four weeks will be voluntary for all of the oarsmen, but the coach requests that all of the men put in at least a few minutes work on the machines two or three times a week. The machines will be available for the oarsmen at all times of the day, and every opportunity is afforded candidates to get in some regular exercise during the examination period.

By applying at Room 3-005 the candidates may obtain lockers in the block assigned to the crew, in the locker room adjoining the room where the machines are kept. The numbers of the lockers assigned to the crew run from 076 to 1-145, and students may either exchange their old locker keys for keys to lockers in this block, or apply for new lockers. The coach desires to have every man take his practice in rowing trunks and shirt, as good work cannot be done in street clothes.

Coxswains as well as the crew candidates are expected to report at the meeting tomorrow, in order that the management may get their names and inform them when their presence is required.

Following the mid-year examinations regular practice will be held on the machines, the candidates reporting every day. On Saturdays, if arrangements can be made, the candidates will be taken up to the Newell boat house at Harvard, where a much larger number of machines will be available, together with the rowing tank. During the week of vacation following the examinations, candidates will be expected to put in as much time on the machines as they can. A short run after the practice is prescribed as part of the practice until further notice.

Benjamin H. Sherman '19 of Newport, R. I., has been made assistant manager of the second crew, and not S. A. Sherman as announced Friday. There will be a competition open to members of the freshman class beginning immediately after the mid-year examinations, when three men will be retained for the varsity competition next fall. In May one of the three will be made freshman manager for this year, and will be entitled to his class numerals if the 1920 eight wins the class races.

**SHOW COMPETITIONS TO CLOSE SOON**

Music for the Tech Show 1917 will be due in the Show Office, Room 1-075, at 5 o'clock Wednesday. This is the music which was to be written for the lyrics given out at the meeting on December 8. Men showing ability will be retained as a committee to write the remaining musical numbers for the Show.

Posters to be entered in the Poster Competition must be handed in Friday afternoon, January 12, before 5 o'clock, at which time the competition officially closes. The award of prizes will be in the hands of competent judges and the results of their decision will be announced next week.

The posters may be turned in either at the Show Office or to G. Donald Bradley '18 in the third year drawing room in Rogers.

**ALUMNI BANQUET**

(Continued from page 1)  
duties of his office, presented some startling figures as to the "per capita cost of a graduate" and lauded the work of President Maclaurin since his inauguration in 1909.

**Glidden '93 Leads Songs**

Immediately before the speaking, George B. Glidden '93, chairman of the Dinner Committee, led in the singing of "Take Me Back to Tech," Gillett Burgess' "How Soft Were Swain's Commands," and the "Stein Song." It was necessary to sing the latter at this point rather than in closing as the orchestra had to leave early. Cheers were led by Lawrence Allen '07. The committee in charge of the dinner consisted of George B. Glidden '93, Harry W. Gardner '94, Edward F. Parker '04, Lawrence Allen '07, and Harold E. Kebbon '12.

**Sixteen at Speakers' Table**

Seated at the head table in the order of position from the east end to the west were: F. A. Smythe '87, a Vice-President of the Alumni Association; I. W. Litchfield '85, Field Manager of the Alumni Association; Professor C. H. Peabody '77, chairman of the Faculty; M. C. Brush '01, President of the Boston Elevated and a member of the Executive Committee of the Alumni Association; Dean Burton; R. B. Price '94, Vice-President of the U. S. Rubber Co.; E. S. Webster '88, of Stone & Webster; Doctor Maclaurin; Charles A. Stone '88, of Stone & Webster; Willis R. Whitney '90, member of the Naval Advisory Board; Joseph H. Knight '96, a Vice-President of the Alumni Association; Francis R. Hart '89, President-Elect; George Wigglesworth and Everett Morse '85, members of the Corporation; W. K. Lewis '05, member of the Executive Committee of the Alumni Association; George B. Glidden '93, Chairman of the Dinner Committee, and Walter Humphreys '97, Secretary of the Alumni Association.

**President Stone '88**

President Charles A. Stone '88 said in part:

"Last June Technology celebrated her fiftieth anniversary. Each year for fifty years she has made her contribution of trained alumni to our country. Can she now perform a service to our national government by so organizing her alumni as to assist in the movement for preparedness which is the great need of the hour? Your Alumni Association believes that she can and has committed itself to assist the Government of the United States through cooperation with the National Council of Research and the Council of National Defence.

"Just at the close of the Civil War, Professor Rogers and a few broad-minded men in Boston realized that America's great need was for trained technical men prepared to attack and coordinate her great industrial problems. The mass of people in the United States neither understood nor appreciated its importance at that time. Half a century has rolled by during which all the nations of the world have been engaged in a struggle for industrial supremacy and expansion. This has now culminated in the most disastrous war known to history, of which the end is not yet in sight. And now the need of preparedness, both industrial and military, which President Rogers foresaw is forcibly impressed upon every thinking man and woman of the United States.

"That preparedness requires technical training is not always appreciated, but the fact remains that technical training is the foundation for both military and industrial preparedness. It is the technically trained men who are fighting the battles today, on the sea, on the land and in the air, and it is the technical men at home who are showing the way for maintaining the industries in the war-stricken countries. Even in the countries now at peace the technically trained man is in demand more than ever before, for it is he who must devise ways and means of providing substitutes for the many things they can no longer import.

"The lesson of preparedness in Europe has been learned. England, France, Italy and Russia are fully awake now to the importance of preparedness. Every one of the belligerents has already made preparations for rebuilding such works as have been destroyed by war, and more than that, in many cases elaborate preparations have been made for reestablishing foreign and domestic commerce and industry at the close of the war. More than ever before our foreign neighbors are on the alert to develop their own resources and turn to their advantage those of other countries. Whether they wish or no, they will have to make extraordinary exertion to recoup the losses they have suffered in the war. Accustomed to frugal living and accustomed also to working under military discipline, every one of the belligerents will be effectively equipped for accomplishment as never before.

**America's Future Hope**

"Wherein lies the future hope for America in this world struggle? FIRST: in our realization of the need of preparedness to meet conditions that will arise as soon as the war is over or in case we become involved. SECOND: in prompt action on the part of our scientific and technical men in pointing out things that America most needs in order to maintain and develop her industrial activities. THIRD: in pointing out to our government these needs and showing how help may be secured.

"There are countless other problems in which Technology men can be of service to our government and our country. And the reason lies in the fact that the scientifically trained man learns the art of intelligent research and acquires the power of analysis. He can ascertain the means by which certain results can be obtained. Besides this he can intelligently point out the cause and effect to our people and our government, thereby fostering development of our industries and showing means of accomplishment. In short, the scientific and technically trained men of any country can more than any other class of men prepare the way and help develop those things which make a nation great, advance her prosperity and prepare for the future.

"Let the M. I. T. be the school whose Alumni and Faculty shall lead the way that others may follow."

**Doctor Maclaurin Takes Stock**

Doctor Maclaurin was greeted with wild applause when he arose to address the assemblage and was cheered again when he announced that "Mr. Smith's cheque was received last Thursday and the whole four million dollars has been paid into the Institute treasury." In "taking stock of the Institute," he spoke of "the sounder condition," the "well-equipped plant," the greater strength than ever before in the esteem of our community," and emphasized the great problem as "to make it (Technology) even more distinctly national." He said that in line with the latter idea in recent years men whose interests are world-wide in scope have been added to the Corporation, and mentioned "Mr. Vail of the Telephone, Mr. Elliot of the New Haven Railroad, Mr. (P. S.) du Pont of the Powder Company, Mr. Frank A. Vanderlip of the National City Bank, and Mr. Otto Kahn of Kuhn, Loeb & Co."

"It is clear, of course, that the only permanently effective means of maintaining a national school is to train men in such a way that they can be of service anywhere within the nation." He predicted an increased demand for the man with "sound scientific training," and particularly emphasized the training of men "in the methods of research."

**"The Great Drives"**

Using the language of the war President Maclaurin reviewed Technology's "great drives," saying that "we began five years ago, under the generalship of Rollins, a drive on the Commonwealth of Massachusetts" for a contribution that would enable us to attempt much larger operations. "The next drive was a relatively short one" to secure funds for the New Site; "then came the greater drive extending over years to deal with the erection and equipment of our new buildings. The last six months has witnessed a drive for four million dollars for special purposes. We must now have a special drive for scientific men of business."

He deplored the "dangerous feature in our national character, a spirit—a habit we may call it,—of thriftlessness and extravagance," and went on to say that "a man trained as Tech men are trained, comes by instinct to look naturally on waste as a hateful thing in itself." He closed by saying that this was one of the chief reasons why "the progress of this country will be largely affected by the men who are turned out at the M. I. T."

**Doctor Whitney on Research**

Willis R. Whitney '90, director of the research laboratory of the General Electric Company at Schenectady, is a member of the U. S. Naval Consulting Board, and his address had to do with preparedness. Dr. Whitney paid tribute to Technology by noting it to be the foremost technical school in America, but he went on to say that no school in this country is doing anywhere near the amount or quality of new or research work that we ought to do in America. The foundations for practically all of the engineering work we are doing are laid by a certain kind of investigator and in foreign lands. "In taking a national inventory," said Dr. Whitney, "as we are forced to do now, we see how largely a country depends on new phenomena. Foreign countries have supported great numbers of investigating scientists, most of whom are professors in universities. Excepting for comparatively few lectures, their teaching has been entirely by example, and in that way they have in

(Continued on page 4)

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