

THE TECH

SHOW REHEARSALS IN FULL SWING

First Rehearsal of Cast
and Chorus Together
Last Saturday

MANY NEW PRINCIPALS

Poster Design Has Been Placed
On Postals Which Will be
On Sale Wednesday

Full of laughs and snappy from start to finish was the first rehearsal of cast and chorus together of the entire Show held Saturday in the union. The men have been drilled hard and have been practicing little bits of dialogue and separate dances, and the effects when they tried the whole together Saturday was surprising. Malcom, the author has added many bright lines to the piece, which was already full of fun, and the chorus enjoyed it in a way which bids well for its reception by an audience.

The music this year is better than usual, and the Tech Show has at last got some real singers. Joseph L. Champagne, a freshman, has a good baritone voice and will make good in some songs of his own composition. One particularly effective number of his is "My Love for You", which comes in the first act in which he sings with Faunce, Jacobs, and Campbell. Faunce has a good voice which goes well with Champagne's, and the quartet is a piece of close harmony such as the Show has not had for some years. There are many topical numbers in the piece, and Ray Allen is as good ever in these songs. He sings as he did three years ago as Alex., the Grind, when he made such a hit in his duet with Bill Adams. He can certainly get the full value out of a lyric, and all his lines tell.

The question is often raised as to who really creates a part, the author or the actor, but there can be no question who created the part of Grimm, played by the actor-author Malcom. Malcom is even better than he was as the Uncle last year, and the way he commands his secretary, Allen, who is some feet taller than he, is mirth-provoking in the extreme. Hooper has a pretty big part, in one sense of the word, and his six feet five can well fill it. As the town crier, he can yell "Hear Ye" in a way which would wake up anyone, and he isn't at all afraid of using his vocal powers. He has a song in the first act which should be one of the hits. James I. Finnie shows that his four years' connection with the Show has certainly done something for him. Everyone who saw "Over the Garden Wall" last year will remember his portrayal of the cabman, and the fun which he got out of the numbers in which he appeared, and this year he has a part which fits him admirably. He has the part of the principal comedian with Grimm, and is a rattling mate for the latter. The author has introduced several dialogues between these two, and in one or two places has a dialogue "ensemble" which brought a laugh to the stern face of the fierce Indians. Edgar I. Williams 1909, of architectural fame, has a part which is inconspicuous, but well taken. He has a number with White, Finnie, and Catling which promises well. The lyric to this song by Elliot Q. Adams is particularly good, and has many topical encores, some of them about Smith College being the best verses in the piece.

It may not be polite to leave the ladies until the last, but it is certainly not because of any inferiority on their part. There is no need to say anything about Pelden, who has a reputation earned in many performances. Jacobs is better than he was last year, which is saying a great deal, and in Arthur C. ... the Show has found a man for leading lady in future productions.

(Continued on page 4.)

NEW INSTRUMENT OF GREAT VALUE

A Unique Addition to the
Equipment of the
Institute

SCLEROSCOPE BOUGHT

Hardness Measuring Instrument
Placed in the Mechanical
Engineering Lab.

One of the recent additions to the equipment of the Mechanical Engineering Laboratory of the Institute is a scleroscope to measure the hardness of metals, machine parts, and tools.

Instruments of precision for nearly all kinds of measurements except hardness have been perfected, but the methods of testing hardness have been crude and expensive. In fact, there has been no very reliable or simple method of determining the degree of hardness of steel. The scleroscope which is applicable to laboratory and shop, determines the hardness of metals accurately and economically.

Applied to the arts, this instrument enjoys a field quite unique. It will measure the slightest variation in hardness of steel, which is a most important factor, as well as the difference in hardness between lead, brass, compositions, alloy steel, tool steels, and high speed steels.

One of the great results of the precise quantitative measurements of hardness is the determination of the relation of the hardness of cutting tools to the work to be machined. We are all aware that the tool must be harder than the material, but how much harder? The scleroscope shows that the tool twice as hard as the work will cut, but for economical cutting the ratio should be three to one, or four to one. Some tools will do two or three times as much work as others, because they are of different hardness. Hence the science of tool-making may be systematized so that only highly efficient tools will be produced.

A matter of great value in assembling machines is to pre-determine the comparative wear of the different parts, and here the scleroscope will enable one to construct each part of a material which possesses the precise degree of hardness to give uniform wear.

The scleroscope is also applicable to determining the carbon content of carbon steels, and by careful work we are able to judge as closely as the average chemical analysis may indicate. This is done by the crystallation method, that is, noting the drop in hardness as the steel is quenched at higher temperatures. In such testing the slightest changes resulting from the addition or subtraction of an ingredient are detected. As the measurements are quantitative, the laboratory work is greatly facilitated.

This is an epoch of wonderful steels, as the most important steps in the manufacture of steels, especially in the quality of hardness, have occurred in the past few years. In fact, the commercial watchword is not only high-speed steels, but higher speed steels, and it is particularly fortunate that we have an instrument which presents an accurate and simple method of measuring their hardness either for scientific or commercial purposes.

The scleroscope will be placed in the laboratory where it will be used by the students in machine tool work. As these students are studying the principles of machine construction, this hardness measuring machine will be of the greatest value to them, in determining the properties of the different metals, and to test accurately the effect of the different heat treatments of steel, which will be of the highest value educationally and practically.

News has been received of the engagement of Miss Ruth Maxwell 1908 to Henry Buechser.

STRONG ADDRESS ON OBLIGATIONS

Ex-Governor Utter of Rhode
Island Speaks at
Y.M.C.A. Dinner

ELECTION OF OFFICERS

Frank Russell 1911 President for
Coming Season—Worman and
Sewell also Speak

Friday evening a representative body of the students of the Institute gathered for a dinner at the Union. The following men were elected officers during next year: president, Frank Russell 1911; vice-president, John Ahlers 1910; secretary, M. B. Brownlee 1911, and treasurer, R. A. Smead 1910.

After the dinner Mr. L. E. Worman, college secretary of Rhode Island and Massachusetts, spoke on the standing of the Y. M. C. A. throughout the world. What it chiefly stands for, he said, was better men, and what all countries need is better men; therefore, such places as Japan, which fifty years ago was a closed country, now has an increasing number of Associations, and in China, by Imperial decree, Associations will be established all over the empire, though that in itself would not make a good Association. This shows the ability of the Y. M. C. A. to create good men as recognized the world over. But as much as the Y. M. C. A. stands for good men in foreign countries, more so it does here. If we consider all the American colleges we find that the men that enter Association work are men mostly from the fraternities, or the athletic, football and baseball teams, or the college papers.

It is conceded generally that the work of the Y. M. C. A. is most difficult here in Boston. Technology is especially difficult, but this ought only to be an incentive to the men interested to show that students in Tech as well as elsewhere stand for high moral character.

Ex-Governor Utter of Rhode Island gave an excellent and practical speech on how students ought to show their appreciation of what is being done for them both by those sending them to school and those who are giving their time and abilities toward training them to become efficient citizens.

He said that as men grow older they sometimes wonder whether it is what they learn or what they observe that counts most for development. Some of the things he had observed were that two per cent. of all men in active life were college men, and two-thirds of all successful men were college men. This fact shows clearly a college training is linked to success. Now for that chance we are indebted not only to those who may be sacrificing themselves in order that we can go to school, but also those who are sacrificing their opportunities to teach us, and those who founded the institution in which we learn. Though we cannot repay this at all, we can try to balance it by doing for others what these have done for us.

To grow in favor with God and men, you have to take a courageous stand for the principles you are convinced are right, such as total abstinence, or use of profanity. Men will have a higher opinion of you for the stand you take. Finally, he said that the world expected much of college men, and college men generally do much for the people, but how to accomplish the most good is the question. We must not feel that we are accomplished, by any means when we get through school. We must go on with the same kind of work that we have been doing and fitting ourselves for. It is therefore to the students' own advantage that he learn to get most out of life by helping others, and that is precisely the kind of men that the Y. M. C. A. stands ready to help develop.

Mr. J. Sewall, member of the corporation, said a few encouraging words about the Y. M. C. A.

COURSES I AND XI EASILY WIN RACE

Second Place is Taken by
Mechanicals and
Electricals

HOWLAND 1909 FIRST

Time Made Was Excellent in Spite
of Bad Going—Thirty-Two
Men Finish Race

H. H. Howland won the annual inter-course race last Saturday in the excellent time of 25 minutes 17 seconds. This time was remarkable considering the fact that the whole of the course was covered with mud several inches deep, and in many places the men had to wade through the swamps made by the recent rains. The race was held over the same course as the annual Tech-Harvard race, which begins at Highland Station and ends at the Field. The thirteen different courses of the Institute were divided into three groups. The Courses I and XI were combined under the leadership of Capt. Jacobs; Courses II and VI had chase-captain Eldred for the leader, while the other courses were combined under the lead of ex-capt. Ellis.

The civil and sanitary engineers won the race easily, their men scoring only sixteen points; the mechanical and electricals won second place quite handily with 26 points, while the combined courses had to be content with last place.

J. F. McCarthy set a very fast pace at the start, hoping to kill off some of the new men, but this he failed to do, as the new men proved to be in as good condition for a gruelling race as the cross-country star himself. At the end of the first mile McCarthy was leading by a small margin over Howland 1909, and H. S. Benson 1912, the freshman cross-country captain. At the brook which marks the first mile many men had to take an involuntary bath, as the rain had made it quite a good-sized stream. Soon after passing the mile mark the positions of the leading men changed. Howland taking the lead away from his class-mate. Howland was never headed from this point, although he was closely pressed throughout the race by four or five men. At the pig pens which make the two-mile mark, Howland was leading by a hundred yards, with C. P. Eldred 1911 second. It was at this point that J. N. Stephenson 1909 and E. Jacobs 1910 began to make trouble, they having come up into third and fourth places.

From this point the pace became faster, and developed into a fine race between Howland, Jacobs, Eldred, and Stephenson, who finished in the order named. The two freshmen, Benson and H. G. Watkins, and R. D. VanAlstine 1911 had a close and exciting race for the last two prizes, in which the 1912 men proved the victors.

The order of finish of the first twenty-one was as follows:

- 1—Howland 1909. Time 25m 17s.
- 2—Capt E. Jacobs 1910. Time 25m 32s.
- 3—C. P. Eldred 1911. Time 25m 46s.
- 4—J. N. Stephenson 1909. Time 25m 51s.
- 5—H. S. Benson 1912. Time 26m 08s.
- 6—H. G. Watkins 1912. Time 26m 10s.
- 7—R. A. VanAlstine 1911. Time 26m 15s.
- 8—B. C. Huber 1910. Time 26m 40s.

(Continued on page 2.)

CAI ENDAR

MONDAY, MARCH 5.

- 4:15—Mandolin Club Rehearsal.
- 4:15—Show Chorus.
- 8:00—Gym Meet at Gym.
- 8:15—Society of Arts.

TUESDAY, MARCH 6.

- 4:15—Glee Club Rehearsal.
- 4:15—Show Principals.