REV. A. A. STOCKDALE  SPEAKS BEFORE  T. C. A.

Large Crowd Hears Interesting Views of Prominent Clergyman.

Before one of the largest crowds ever present at a T. C. A. meeting, Rev. A. A. Stockdale of Calvary, gave a very interesting talk on current religious topics at the Union yesterday. These topics were particularly interesting. Being him- self a Christian? the pastor said that any- one who tries to lead a clean life and do that which in his own judgment is right, will receive the reward that follows it. He spoke at length about his views on the church and religious organizations.

While there were some controversial points on Sunday, baseball were particularly interesting. Being him- self a baseball fan, he naturally could sympathize with those that enjoyed the game but had no opportunity to make a determined effort to be pres- ent at a T. C. A. meeting, the religious organizations.

Mr. Whiting talks to chemical society. All members went down to the chemical society last night to hear the lecture. Mr. Whiting started on an outline of the elec- trolytic cells in use prior to the in- vestigation of the Whiting Electrolytic Cell. He said that he was working on a process which required the elec- trolytic cells in use prior to the in- vestigation of the Whiting Electrolytic Cell. He said that he was working on a process which required the elec- trolytic cells in use prior to the in- vestigation of the Whiting Electrolytic Cell. He said that he was working on a process which required the elec- trolytic cells in use prior to the in- vestigation of the Whiting Electrolytic Cell. He said that he was working on a process which required the elec- trolytic cells in use prior to the in- vestigation of the Whiting Electrolytic Cell.

MECHANIC ARTS CLUB  MEETING TONIGHT

Will Discuss Securing Section for M. A. H. S. Dorchester  Game Thanksgiving.

Tonight the Mechanic Arts High School Club will meet for the first time this year for a smoker and card party. A series of these entertainments are arranged every year for the Mechanic Arts stud- ents at Technology to preserve a so- mal bond between them.

The principal business tonight will be the discussion of the reservation of a cheering section for a I institute men at the Thanksgiving Day football game between the Mechanic Arts and the Dorchester High schools at the Dorchester Coliseum, Dorchester.

For the meeting tonight there will be a whist game, in which everyone will take part. The highest and low- est scores are to be presented with a desirable trophy. These cards parties are always much enjoyed. Following this refreshments will be served and an all-night card table will be taken in. In previous years card parties have been continuous as entertain- ers, and it is expected that the same will be true tonight. The members of the club urge Mechanics men to attend tonight's smoker, which is open to the members of the organization.

NEW OFFICERS CHOSEN.


At a meeting of the Naval Architectural Society yesterday noon a secretary and a treasurer were elected to take the place of H. B. Cady, who formerly filled both positions. Owing to the sick- ness of Mr. Cady, Mr. Bugge is available to resign, and the society realizing the increasing demands of both positions decided to choose a man for each office. The officers of the society are: President, J. P. Constable, 13; Secretary, A. L. Todd, 11; Treasurer: A. H. Washburn, 12.

The first social function of the society will be a dinner, to take place November 26, at the Union. The officers of the club urge every man in the course to attend.

ATHLETIC MEETING.

A meeting of the Athletic Association has been called by President H. L. Germain, to be held in the Union slip room at 4:15 o'clock. There will be a discussion of the rules for this year, and all members are requested to be present.

CALENDAR.

Friday, November 22, 1912.

4:00—Chess Club Meeting—Union.

5:30—Boxing Team Meets—Union.

6:00—Wrestling Team Meets—Union.

7:30—M. A. H. S. Club—Union.

10:00—Junior Prom Ball In Dorchester Du- 1 Cage.

Saturday, November 23, 1912.

3:00—Tech Show Late Competition Classes.

Cross-Country Race—Union.

PROM. COMMITTEE NOMINATIONS CLOSE AT 10 P. M. TODAY.
The Tech, Boston, Mass., November 22, 1912

EDITORIAL SUBJECT
GIVES WIDE SCOPE

"Distribution of Vacations" Next Subject—Due Monday at Cage.

Guess I’ll have to see “Good Old Burke the Tailor” pretty soon.

That big brother of mine told me to be sure to call on him at 18 School St., or to see Tom Hayes at 83 Washington St., as soon as I landed in Boston, and the bunch here tell me that was good dope.

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McMorrow
College Shoes for College Men
238 Washington Street, Boston, Mass.
CHAPTER OF THETA TAU
ESTABLISHED AT TRCH

National Engineering Fraternity
Locates at 33 Westland Avenue

Theta Tau, a national collegiate fraternity, has recently been established at the Institute. The fraternity has chapters at the University of California, Colorado School of Mines, University of Illinois, and the University of Minnesota.

It has been established here to strengthen the bond of friendship between the engineering students in the Institute, its scope being from Alpha Kappa to Nu Sigma.

They have a meeting at 33 Westland Avenue.

CHEMICAL MEETING.
(Continued from Page 1.)

The secret that lies under the instability of the sodium amalgam is the fact that the cell is lowered by the inability of the sodium amalgam to float on the mercury; hence the cell is placed in a beaker, the sodium amalgam being surrounded by a mercury jacket. Mechanical circulation of the mercury, such as was used in the Solvay process, was tried but Mr. Whiting found that the conditions of flow were not such as to make the efficiency of the apparatus varied within very wide limits, often being as low as 20 per cent.

After describing those previously known types, Mr. Whiting outlined the stages that had followed in developing his own type. There is first the beaker stage, when the work is carried on in the laboratory, and the efficiency of the process is put on sound basis. At this time the invention is one that is patentable, and whether the industry which is to use the invention is one that can produce at a profit on the work done. Then comes the second stage, when small sized models are made. In the case of his cell the work in the first stage was so well done that a severe test showed that the cell had an efficiency of over 90 per cent. Since then, as the models are constructed, and after one of these has been made, as perfect as possible, several are grouped together to form a semi-commercial plant. If the work has been well done in the first three stages this step does not prove an insurmountable obstacle to the commercial utilization of the invention.

The final stage, the building of commercial plants, is a growth from the small plant. In the Whiting cell the "reactor" stage was largely trying to find some more perfect means of circulating the mercury. A tank was arranged so that the mercury which covered the bottom of the tank could be drawn off very rapidly after it had received a certain per cent of sodium through the decomposition of the brass which lay over it. After the cell had been made so that the mercury and the sodium electrode were in the most efficient location, it remained to see the process to the conditions imposed by mechanical and commercial conditions. In this connection Mr. Whiting said that the chemical should call in the engineer; for most chemical processes are too per cent. ideal to permit a perfect stage of development. He very aptly illustrated this point, and laid much stress on the statement that the average chemist is an intermediate factor not purely chemical.

GLASS SAND INDUSTRY
HIGHLY SPECIALIZED

Many Plants in Mississippi Valley Employed in Sand Purification.

The preparation of glass sand has become a highly specialized industry and in the middle Mississippi Valley, or more thoroughly, the Mississippi River, are many industries which are engaged in the preparation of glass sand. The minerals used for this sand are abundant in the United States, according to the United States Geological Survey, are mainly composed of quartz, and a complete process of preparation includes mining, washing, crushing, and grinding the component grains, screening, washing, draining, drying, and finally screening to various limits. Some beds of sandstone are so friable and soft that only blasting down and slight crushing will be done. The sand is dried and screened. Many advances have been made in this line of work, particularly in Illinois, where hydraulicizing is employed to obtain sand from the quarries. Washing disks removes even from high grade sand, consider--

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RUSSIAN GOLD FIELDS

Rank Fifth in the World's Production.

The Russian Empire, including Siberia, is one of the world's producers of gold. The output in 1898 was $4,466,000, which is, however, a decrease of more than 100,000 compared with the figures for 1910. This decrease is due mainly to the shortage of water in 1911 in the placer workings in Siberia. The Russian production of gold has been greatly affected by the price of silver, which is often its use or rejection, is affected by the small percentage of impurities that may be washed away.

The value of all the gold produced in the United States from 1788 to the end of 1911 is estimated at $3,380,000; the value of the silver at $2,029,000.

JUNIOR COMPETITION.

The competition for Assistant Assistant Professor of Technology has been opened to all students having entered with 1,000, or being entered with this class. The ranking of candidates will be based on the aid of the competition turned in between November 1 and Christmas vacation.

All men interested in the competition should present their bid in the Technological office between 1:30 and 3:00 on Friday afternoon. Information with regard to the work and signing contracts will be given there.

After he had outlined the principle of the cell he gave a very clear explanation of how his commercial cell works. Time after time he stopped his explanation to tell how this or that difficulty had been overcome.

The eighty or ninety men who heard the talk received it with great interest and appreciated their appreciation after the talk by a sincere vote of thanks. Then the men went off for refreshments, and many spent an hour or two in the Union having a good time.

C. F. HOVEY & CO.

Men's Furnishings

Our Special $1.50 Negligee Shirts $1.00

These Shirts in a large assortment of patterns and colors—white grounds with blue, black, lavender and tan stripes, also color grounds of blue, gray, tan and lavender. At ........................... $0.00

Underwear

Merino Underwear—In white and natural, in medium and full weight, per garment ........................................... $1.00 upwards

Balbriggan Shirts and Drawers—In Full weight, per garment ........................................... $1.00 upwards

Balbriggan Union Suits—In Full weight, per garment ........................................... $1.00 upwards

Half Hose

English Cashmere Half Hose—In medium and light weight, per pair ......... 50c: upwards

Silk Half Hose—With fish sales in black, and a good line of all colors, per pair ........................................... $1.00 upwards

Acordian Ribbed Half Hose—In all the popular color combinations, per pair ........................................... $1.00 upwards

THE TECH, BOSTON, MASS., NOVEMBER 22, 1913


different prices for different materials. The materials used for this sand are abundant in the United States, according to the United States Geological Survey, are mainly composed of quartz, and a complete process of preparation includes mining, washing, crushing, and grinding the component grains, screening, washing, draining, drying, and finally screening to various limits. Some beds of sandstone are so friable and soft that only blasting down and slight crushing will be done. The sand is dried and screened. Many advances have been made in this line of work, particularly in Illinois, where hydraulicizing is employed to obtain sand from the quarries. Washing disks removes even from high grade sand, consider-

For example, the great demand for sand is due to its use in the manufacture of glass, and the deficiency of sand in some parts of the country is due to its use in the manufacture of glass. The deficiency of sand in some parts of the country is due to its use in the manufacture of glass.

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ROOM FOR RENT—Back room for two men, large desk, steam heat, continuous hot water, two closets, three windows; $5.00 per week. 38 St. Botolph Place, (Turn-Through-Mail).

FOUND—Mule tail and case, Pipe care, Rheninows, Text-books, Umbrella, Bunch of keys, 2 Stick pins, 2 Note case, Raincoat, Text-books, Umbrella, 2 pairs of Rosary Beads, Fret-

ternity Pin. Apply at Bunar's office.

Dancing Parties every Wednesday and Saturday evenings. Landlin Gymnasium, 64 St. Botolph street, Boston. Redwood Johnston. (Turn-Through-Mail)

FOUND—A leather covered loose leave book. $1.00 reward. Written Pawle, Cage.

LOST—Bank Book, Name, C. J. (S. B.)—Please leave a Meal Ticket $4.50 14 Meal Ticket, 33.

NOMINATIONS for the Junior Prom Committee due at the Cage this evening at 10 o'clock. Each nomination must be signed by ten men of the Junior Class.

LOST—Bank Book, Name, C. J. (S. B.)—Please leave a Meal Ticket $4.50 14 Meal Ticket, 33.

S. J. C.

Merry Christmas and a happy New Year.

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