change of heat must be thoroughly stirred in order to facilitate this interchange. A system of stirrers driven from an electric motor serves to give this efficient agitation and also to produce uniform temperatures. The radiation of heat either to or from the calorimeter is to be prevented as far as possible, so the apparatus as it is being used is air jacketed, water jacketed, and lagged. From tests already made it has been found that the loss of heat is very slight, and that this slight loss can be determined by a short radiation test made after each determination. Lastly some means must be provided for rapidly obtaining low temperatures. The evaporation of liquid ammonia serves for this purpose, giving temperatures far below zero in a few minutes.

From experiments already performed it is probable that the results obtained will be accurate to one tenth of one per cent. For all practical purposes this is quite close enough.

Since the specific heat of the brine varies both with the temperature and with the amount of salt in solution, it is intended to run a series of tests which shall show clearly what this variation is, special attention being paid to brines of strengths used in practice.

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**The Relay Race.**

In the Relay Race at Philadelphia, April 24th, M. I. T. ran against Brown, Dartmouth, Amherst, and Boston College. On the first relay A. W. Grosvenor, M. I. T., led by about three yards. On the second relay R. P. Priest increased lead for M. I. T. to five yards. On the third relay F. H. Lathrop, M. I. T., was passed by Boston, of Dartmouth, about three hundred yards from start. Boston lead by four yards at end of this relay, Lathrop second, and Gunn, of Brown, two yards behind Lathrop. On the fourth relay C. B. Stebbins, M. I. T., caught Bolser, Dartmouth, at about 220 mark. They ran neck and neck some hundred and fifty yards when Bolser managed to forge three feet ahead. The Brown runner, Gaskill, was meanwhile catching up and about fifty yards from finish was even with other two colleges. Gaskill forced himself ahead, winning by two feet; Bolser, Dartmouth, second, eight inches ahead of Stebbins. Amherst was thirty yards behind, and Boston College brought up the rear with over fifty yards. The time, 3 min. 3r sec., is six seconds faster than the time our team made in these games last year.

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**Hare and Hounds.**

The handicap run, on Saturday, of the Hare and Hound Club for the prizes which were on exhibition last week in Rogers, brought out a field of twenty men, fifteen of whom covered the entire course. The men ran over an eight-mile course at Arlington Heights. John Graham, of the B. A. A., acted as judge, starter, and timer.

The men finished in the following order: First, W. E. Reed, '97 (5 minutes), time, 1 h. 8 min. 47 sec.; second, E. P. Osgood, '97 (1 hr. 5 min.), 1 h. 9 min. 30 sec.; third, H. A. B. Campbell, '99 (scratch), 1 h. 9 min. 30 sec.; fourth, H. B. Mayhew, '00 (scratch), 1 h. 9 min. 47 sec.; fifth, J. C. Riley, '98 (3 min.), 1 h. 14 min. 40 sec.; sixth, H. L. Bodwell, '98 (scratch), 1 h. 16 min. 29 sec.; seventh, E. W. Ritchie (3 min.), 1 h. 16 min. 38 sec.; eighth, C. S. High, '98 (3½ min.), 1 h. 16 min. 38 sec.

R. Suter, '00 (3½ min.), W. J. Angus, '00 (1 min.), S. C. Sears, '00 (1 min.), W. Brewster, '98 (7 min.), F. Everett, '98 (3½ min.), H. H. Sullivan, '98 (5 min.), and J. H. Batcheller, '00 (7 min.), were not timed, but finished in the above order.

Reed was awarded first prize, Osgood, second prize, and Campbell, third prize and also the time prize.

Mr. V. R. Lansingh's good judgment in placing handicaps was shown by the close result of the race.