

SPORT NEWS OF
A DAY; HOME
AND ABROAD

BOWLING.

Commercial League.

The Atlantic Sugar Refinery team took all four points from the T. Mc. Carbour teams will roll. Last night's scores follow:

T. McAvity & Sons—	Total. Avg.
Bewick	88 69 86 242 80-2-3
Lawlor	83 79 80 242 80-2-3
Luck	83 82 94 269 86-1-3
Christopher ..	84 80 85 249 83
Markham	77 88 78 238 79-1-3
418 397 418 1230	

Atlantic Sugar—

Gears	77 72 93 244 81-1-3
Harley	74 75 89 238 79-1-3
Howard	80 87 87 254 83-2-3
Sullivan	88 95 91 274 91-1-3
Archibald	99 91 74 264 85
418 420 436 1274	

Manufacturers' League.

The T. S. Simms team took three points from the Workmen's Compensation Board team in the Manufacturers' League game on Black's alleys last night. The scores follow:

Workmen's Comp. Bd.—	Total. Avg.
Johnson	77 84 103 274 91-1-3
Robinson	77 71 75 223 74-1-3
Sugrue	70 91 77 238 79-1-3
Sinclair	85 74 69 228 76
Weatherhead ..	81 106 94 281 93-2-3
390 436 418 1244	

T. S. Simms & Co.—

Shepherd	79 82 81 242 80-2-3
Ritchie	73 84 82 239 79-2-3
H. Tower	79 73 77 229 76-1-3
R. Tower	84 79 96 259 86-1-3
Oliver	99 121 77 297 95-2-3
404 439 413 1256	

Garrison League.

In the Garrison League last night on the Armories alleys, the Ordnance and the Artillery No. 1 each won two points. The scores were:

Ordnance—	Total. Avg.
Morrison	84 94 96 284 94-2-3
Price	82 86 85 253 87-2-3
Duffy	87 86 88 261 87
Lake	109 106 94 309 102-2-3
Wiggins	96 106 101 303 101-2-3
478 479 464 1421	

Artillery No. 1—

Dodge	88 85 93 276 92-1-3
Scott	80 110 81 271 90-1-3
Hughes	96 102 92 290 99-1-3
Evans	87 92 119 298 99-1-3
Gamblin	95 87 116 298 99-1-3
455 478 501 1432	

Y. M. C. A. House League.

In the Y. M. C. A. House Bowling League last night, the Canadian Bank of Commerce took three points from the Orioles. The scores were as follows:

Can. Bank of Com.—	Total. Avg.
Pheney	66 79 80 225 76
Marlin	79 76 108 263 84
Rafuse	96 102 80 278 92-2-3
Rockwell	63 69 73 205 68-1-3
Rideout	71 95 101 267 89
869 421 487 1237	

FIFTEEN MINUTES
OF RADIO EACH DAY

By Edward N. Davis
Formerly Technical Electrical Expert For U. S. Government

Lesson No. 201.
VACUUM TUBE CHARACTERISTICS.

Under the broad classification "vacuum tubes" is included the various types of evacuated glass bulbs used as transmitters, rectifiers, amplifiers and detectors. Tubes employed in the radiation, reception, or amplification of radio waves are of the three electrode type, the bulb containing three metallic elements, namely, grid, filament and plate. Transmitting tubes range in power from those with an output of a few watts and having the dimensions of a small electric light bulb, to the powerful transmitter tube capable of developing 100,000 watts of high frequency power.

In tubes used for radiating a comparatively low amount of energy the small dimensions of the plate permit but a fraction of an ampere to be conducted, due to the excessive heat which develops if larger currents are used. For transmitting tubes of 100,000 watts the plate consists of a heavy copper tube and the great amount of heat generated may be dissipated by immersing the tube in a tank and subjecting the surface of the tube to a constant cooling, circulation of water. This tube is approximately three feet in length with a diameter of three and one-half inches at the base. The feet in length with a diameter of three and one-half inches at the base. The feet in length with a diameter of three and one-half inches at the base.

Vacuum tubes of the two electrode type are in general use as rectifiers for the conversion of alternating current into direct current. Of the three electrode types used in the reception of radio signals, the degree to which the bulb is evacuated depends upon the service for which it is designed.

Tubes employed as amplifiers are termed "hard tubes" have a high degree of evacuation and are operated with a comparatively high plate voltage. It is necessary not only to extract the air within the bulb but also to carefully remove the air from the walls of the bulb and from the metallic elements which constitute the filament, grid and plate.

Detector tubes, or "soft tubes" as they are commonly known, are not as highly evacuated as amplifier tubes due to the fact that they are used as detectors from tubes from which the gas has been exhausted to a greater degree, Helium, neon, carbon dioxide, nitrogen and argon are gases employed in certain tubes to improve the detecting properties. Tubes with high vacuum may be operated satisfactorily in parallel, whereas tubes of low vacuum seldom can be the same quantity of gas and operate poorly in parallel, due to their different characteristics.

For increasing the emission of electrons, the tungsten filament in many types of tubes is coated with oxides such as calcium, barium or thorium. An oxide-coated filament, in addition to giving off electrons freely at a lower temperature than is required in the case of a pure metallic filament, also evaporates the same quantity of electrons with approximately half the amount of power. For this reason tubes employing oxide-coated filaments operate very satisfactorily as detectors or amplifiers.

The tungsten filaments of transmitting tubes should be operated at constant voltage rather than at constant current as the filament life at constant voltage is approximately three times greater than at constant current. In tubes employed as detectors or amplifiers, it is important to operate the filament at as low a temperature as possible consistent with good service and thus prolong the normal life of the filament which, with good care, should give an average service life of 1,000 hours.

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THE MAGEE JANUARY SALE CONTINUES.

Exclusive Fur Coats
For Expected Discounts

The quality is supreme and the kind we are proud to sell, the kind which will give you absolute satisfaction and service for many a season. The modes and lines are very smart but practical. The prices, the quality, styles, leave nothing to be desired.

QUALITY FOR QUALITY THERE ARE NO SUCH COATS FOR THE PRICES.

Every Coat Will Mean a New Friend For This House.

FOUR SPECIAL BENEFIT DAYS FOR YOU AND YOUR FRIENDS

The Response to the First Series of Benefits Prompts Us to Emphasize Some More.

ON WEDNESDAY, THURSDAY, FRIDAY, SATURDAY

January 10th, 11th, 12th, 13th.

NATURAL WOOL SCARVES

Guaranteed Values \$45
FOUR DAY JANUARY PRICE \$15.00

2 CHOICE MINK COATS

Most elaborately but serviceably made. 41, 48 inches in length with sweeping shawl collars. Wonder Coats. Guaranteed Values, \$850, \$1400
FOUR DAY JANUARY PRICES \$675, \$1000.

WOMEN'S FINE WINTER COATS

of Frieze Cloth for stormy weather. Guaranteed Values, \$40
FOUR DAY JANUARY PRICE \$29.50

SOUTH AMERICAN BEAVER OR NUTRIA

In smart 86 inch sport model coats. Self Trimmed, Belted. Guaranteed Value, \$450
FOUR DAY JANUARY PRICE \$370.00

THE CHOICEST PERSIAN LAMB COATS

Each and all having the regular full, lustrous curl present only in the better garments. The collars and cuffs are of choice Skunk or Black Lynx Cat of the silkiest kind. Every required size and several styles. Guaranteed Values, \$500, \$550
FOUR DAY JANUARY PRICE \$395.00

ALL HUDSON SEAL COATS

In a splendid choice of styles. With choicest Skunk collars and cuffs. All favored lengths and required sizes. There are garments self-trimmed for those desiring them. Guaranteed Values, \$400, \$425, \$475, \$525
FOUR DAY JANUARY PRICES \$342.00, \$362.00, \$392.00

EVERY ELECTRIC SEAL COAT

is also included. There is Grey Opossum, Squirrel, Black Lynx Cat, Skunk, Beaver used for collars and cuffs, or self-trimmed if you wish. Many Styles. All Sizes. Guaranteed Values, \$200, \$250, \$275
FOUR DAY JANUARY PRICES \$129.00 \$167.00

ANY MUSKRAT COAT HERE

is very much underpriced now. There are Raccoon and self-trimmed garments. Several styles, lengths and all required sizes. Some garments are elaborately trimmed with five row border effect on the skirt collar, and cuffs of Muskrat. Guaranteed Values, \$175, \$200, \$225, \$275
FOUR DAY JANUARY PRICES \$105.00, \$142.00, \$167.00, \$217.00

WOMEN'S FINE WINTER COATS

of Genuine Velour Cloth. Guaranteed Values, \$45, \$50.
FOUR DAY JANUARY PRICE \$37.50

CHOICE SCOTCH MOLESKIN COATS

In a pleasing variety of Styles and Lengths. Belted or loose models. 5 of them. Guaranteed Values, \$625 to \$700
FOUR DAY JANUARY PRICES \$415.00 to \$465.00

EVERY FUR IN THIS SHOP IS EXAMINED FOR AND GUARANTEED AGAINST IMPERFECTIONS ALWAYS.

D. MAGEE'S SONS, LIMITED

Master Furriers Since 1859

St. John, N. B.

AMALGAMATION SALE!

Success Assured on Opening Day

Great shoe bargains taken advantage of by hundreds on Saturday. Store crowded all day. This sale will be continued until at least one half of our stock has been sold. Remember, we have only one store now. Sale is at 90 King street.

A FEW PRICES TAKEN AT RANDOM:

Men's Brown Calf Blucher Boots	on the inside. Regular \$3.45.	widths. Regular \$6.00. Out they go for
Broad toes. Regular price \$5.85.	Amalgamation Sale \$2.45	Amalgamation Sale \$3.85
Men's Felt Boots	Heavy felt soles and rubber heels. Regular \$4.50.	Ladies' Hockey Boots
Recorde toes. Goodyear welts. Regular \$6.50 values.	Out They Go At Half Price \$2.25	With ankle supporters and straps: sizes 2 1/2, 3. Regular \$4.50.
Special Price \$3.95		Amalgamation Sale \$2.98
Men's Box Kip Blucher Cat Boots		Ladies' Brown Calf Two Strap Shoes
All solid leather. Regular \$5.00.	LADIES' 4-BUCKLE OVERSHOES	Military heels. Regular \$4.85.
Amalgamation Sale Price \$3.45	First quality, medium and low heels. On Sale \$3.85	Amalgamation Sale \$2.95
Men's Grain Solid Leather Working Boots	40 Pairs of Ladies' Kid and Patent Leather Pumps and Oxfords	Ladies' High Grade Brown Calf Oxfords and Brogues
Bellows tongues. Regular \$5.50.	Louis heels: sizes 2, 2 1/2, and 3. Worth from \$4 to \$6.	Low and Military heels; Goodyear welts. A real bargain. All sizes in the lot. A \$9 shoe for—
Special Price \$3.65	Amalgamation Sale, pr. 65c	Amalgamation Sale \$4.95
Men's Brown Calf Blucher and Bal Boots	Ladies' Cushion Sole Boots	Ladies' Black High Cat Boots
Goodyear welts, slip soles, rubber heels, new French toe. Regular \$7.00.	Made of fine kid, flexible sole and rubber heels; EE	Louis heels: sizes 2, 2 1/2, 3, 3 1/2, 4 and 6 1/2. Values from \$5 to \$8.
Sale Price \$4.95		Amalgamation Sale \$1.00, \$1.98
Boys' Hockey Boots		
Made of box kip with spring heel and canvas tops		

LEVINE'S, 90 King St.

(Opp. Woolworth's)

BURNED HOSPITAL

Will be closed (Canadian Press Despatch). Kingston, Ont., Jan. 8.—The Sydenham Military Hospital is to be closed. This announcement follows the destruction last Wednesday evening of two of the buildings connected with the hospital.

Sydenham Military Hospital was opened in Kingston in 1919 by the government and patients suffering from the effects of the Great War were taken into the hospital. In 1920 the hospital was taken over by the D. S. C. R. and has since been in operation under that department.

There are at present 140 patients in the institution being taken care of and several of these are bed patients. The patients will likely be transferred to Montreal or Toronto.

U. N. B. CLASSES TO START TODAY

(Special to The Telegraph). Fredericton, Jan. 8.—The University of New Brunswick will resume lectures after the Christmas vacation on Tuesday. Several new students will again take up courses which they interrupted in previous years.

The French course at the Provincial Normal school was resumed this morning.

ASKS DIVORCE

AS WIFE SMOKES. Detroit, Jan. 9.—Embarrassed and humiliated because his wife, Fern, insisted upon smoking cigarettes in bed at midnight; annoyed because she rolled on the floor, screaming and kicking when she was angry, and mortified because she came to his place of business to make trouble, Roy F. Fletcher has filed a bill for divorce with the Wayne County Clerk. Fletcher further claims that neighbors heard his wife's disturbances of temper and that she was not a good housekeeper. She refused to get the meals, he stated, preferred to sit around reading cheap novels, and made a point of disagreeing with everything he said.

NOVA SCOTIA SINGER'S SUCCESS IN NEW YORK

(Halifax Echo). Miss Ruth Blaisdell Macdonald, the young Nova Scotia singer who will be in Halifax on Thursday night of next week, to give a recital under the aus-

WOMAN BURNED WHILE IRONING

New York, Jan. 9.—Her clothes ignited by contact with a gas range while she was ironing, Mrs. Mary Malone, thirty-five years old, of 2,192 Eighth avenue, ran to a bedroom of her apartment, then downstairs to the apartment of a neighbor, setting the house on fire as she progressed.

The neighbor, Mrs. Anna Delevan, threw a rug about the woman, smothering the flames. Mrs. Malone was taken to Harlem Hospital in a serious condition after Father Baylan, priest of the Church of St. Thomas the Apostle, in West 118th street, had administered last rites.

MUSIC LIBRARY CLOSING IN A BURST OF SONG.

Curfew Air Notifies Patrons It Is Time to Quit the Building.

PARIS, JAN. 9.—The library attached to the Paris Opera, which is scarcely known to the general public, but which interests music lovers and students, closes every afternoon at four o'clock, at which moment the attendant calls out: "Closing time!"

This method of announcement appeared to the library officials as hardly as urban enough for the national temple

OF MUSIC, AND SO A PHONOGRAPHIC DISK HAS BEEN MADE, FOR WHICH THE CHORUS OF THE OPERA SANG THE "CURFEW" AIR FROM MEYERBEER'S "HUGENOTS," MODIFYING THE TEXT TO READ AS AN INVITATION TO GOOD PEOPLE TO ENTER THEIR HOMES, "AS FOUR O'CLOCK HAS SOUNDED."

FRENCHMAN IS FINED FOR APPLYING THE EPITHET TO AN ALSTIAN.

Paris, Jan. 9.—(Associated Press).—The Correctional Tribunal holds that the expression "Boche," even if not preceded by the wartime "dirty," constitutes a grave insult when applied to a French-Alstian.

The court has just sentenced a Frenchman to pay a fine of fifty francs and damages amounting to 300 francs for applying the objectionable term to an Alstian named George Dreyfus.

Buttermilk powder dissolved in water is used as a substitute for butter-milk.

"BOCHE" COSTS 350 FRANCS.

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Oak Hall's Bargain Basement

Offers 300 Pair Wide Ribbed Cashmere Hosiery 59c.

Some of these are second quality, but you must look close to find it. They're easily worth \$1.00 a pair.

Towels 5 for \$1.00 Women's Fine All-Wool Drawers 85c, worth \$3

WILSON'S "The National Smoke" BACHELOR Still the most 10c. for the money

ANDREW WILSON & SONS TORONTO MONTREAL