### GREAT PROGRESS

In Technical Education in the

All the Best-Trained American En-

There is no department of education in the United States which has made greater progress within the last twen-ty-five years than that which is ex-clusively or partly technical. It is very largely to the growth of schools of this character and their improved facilities and methods of instruction that is due the mayvelleus industrial progress of the marvelkus industrial progress of the country within the last few years In fact, it is only within comparatively a few years that the country has be-gun to reap the benefit of the instruc-tion of this technical nature which has

gun to reap the benefit of the instruction of this technical nature which has been in progress in our schools.

As a matter of fact, the technical school, as such, is almest entirely a growth of the last fifty years. Even schools of engineering are a growth, not only in this country, but abroad; that is wholly within the present century. Troy, N. Y., has the honor of having had the first school of civil engineering in the world.

Prior to 1825, when this Troy school was established, the orly school of engineering in the United States was the Military Academy at West Point, which was founded in 1882. Naturally the only form of engineering treught in the Military Academy was military engineering, and during the quarter of a century prior to the establishment of the school at Troy the vast majority of men in this country who became practitioners in civil engineering and reached any eminence in their profession were graduates of West Point. In fact, up to as late as the year 1895 a surprisingly large proportion of the civil engineers of the United States were drawn from the ranks of West Point graduates.

In this respect the United States was in how any singular. The first technical school in the world, the Ecole Polytechnique of Paris, was founded only twelve years prior to the opening of the West Point Military Academy. In that school as at West Point, the education in engineering was confined solely to the instruction of students for the strillery and engineering corps of the French Army.

For thirty years after the opening of the Troy school in 1825, down to the first appearance and oreated an engineering the first appearance and oreated an engineering corps of the French Army.

The two shows in the Amusement Hall did an excellent business yesterday despite the outside attraction, the first appearance and oreated an engineering corps of the French Army.

The thirty years after the opening of the west of the Civil War, there were only the most sensational outdoor features were seen in this city. On elevated shou

For thirty years after the opening of the Troy school in 1825, down to the clare of the Civil War, there were only four schools of engineering found in the United States, and of these only two were confined to engineering proper. And in all of these four schools there was comparatively little technical instruction, most of the so-called engineering course consisting of mathematics and elementary sciences.

In 1862 an act of Congress was passed giving to each state a certain proportion of public lands for the benefit of "instruction in the arts and sciences relative to agriculture and mechanical For thirty years after the opening of

ed giving to each state a certain proportion of public lands for the benefit of "instruction in the arts and sciences relative to agriculture and mechanical arts." It was this act which gave the first impetus to the opening of engineering schools, and the development of that branch of scientific education in the United States may be said to have begun with the writing of that important law upon the statute books. Up to 1901 this act resulted in the establishment of no less than sixty-four technical colleges in this country—at least one in each state and territory. Of these sixty-four no less than fifty give instruction in one or more branches of engineering. These colleges now have somewhere in the neighborhood of 1,800 students.

The engineering schools of the United States are now offering unequalled advantages for the acquisition of the fundamentals of an engineering education, and the students in them are working hard to keep abreast, if not well in advance, of other countries in grounding themselves in the principles of scientific engineering.

There has been a very great change of sentiment within the last twenty-five years among practising engineers regarding these technical schools. Not longer ago than the early 70s professional engineers doubted very much the value of the technical training of young engineers and distrusted the engineering graduates. Now, however, there has come a complete revolution of feelings in this respect. General managers and chief engineers at this day prefer technical graduates as their subordinates, since they have been trained in riethods of working and have in every instance a good general knowledge of the fundamental principles underlying all engineering practice. The national societies of engineers now give credit for training of engineers now give credit for training of engineering schools in estimating a candidate's fitness for admission to membership in their societies, and there are now the most cordial relations between the professional engineers in active practice a

resional engineers in active practice and the schools devoted to that science. The technical school in this country met with no welcome from the older colleges and universities. In the beginning these institutions which were dening these institutions, which were devoted to non-technical subjects, were not willing to admit that the study of ovoted to non-technical subjects, were not willing to admit that the study of engineering was on the same high plane as the study of literature, history and philosophy. A change of heart has occurred among the learned gentlemen at the head of these institutions, as well as among the professional engineers. Now, allgare ready to admit that engineering students secure greater adwangement during their college career than any other undergraduates.

One of the highest testimonials ever paid to American progress in technical education came, somewhat reluctantly perhaps, from Dr. Voeberg-Rekow, a German expert, who came over here for the Philadelphia Exposition of a short time ago and recently published in Germany an article summarizing his observations upon American industrial and educational progress. Upon the matter of education he said:

"German industrial advancement is due principally to the thoroughness of our technical education. It is strengthened by the continual introduction of machinery and machine-made tools for

GREAT PROGRESS
In Technical Education in the United States in 25 Years.

All the Best-Trained American Engineers Used to Come From West Point Academy, but it Isn't So Now—A German Expert's Opinion on the Subject.

(New Yerk Sun.)

There is no department of education in the United States which has made greater progress within the last twenty-five years than that which is exclusively or partly technical. It is very largely to the growth of schools of this character and their improved facilities and methods of instruction that is due the marvellcus industrial progress of the country within the last few years. In fact, it is only within comparatively a few years that the country has begun to reap the benefit of the instruction of this technical nature which has been in progress in our schools.

As a matter of fact, the technical THE

THE

Hand labon. Still, in this respect, the English industry in some branches is ahead of us. It is work of the this thin that of the English industry in some branches is ahead of us. It is work in this exclusion, the United States has the foremost place and has made glantle strides not only in applying machine tools, but in inventing and manufacturing them, so that today she supplies us.

"This signalizes in an extraordinary degree the keenness of American in the exhemican. Their signalizes in an extraordinary degree the keenness of American in the liligence. Thus, Americans, though wanting our supplementary technical deducation, thanks to their practical eye, improve upon our methods and apparatus. Theirs is rather the activity of the experimentalist than that of the plain craftsman; but a clever faiseur. The Americans have no thorough education, nor do they possess a modern industrial system as we Europeans understand those terms. The Americans understand the treatment of the experimentalist than that of the laint or the plain craftsman; but a clever faiseur. The Americans have no thorough education, for the experimentalist than that of the experimentalist than that of the experime

Special Attractions are of a Hegh

Order—General Notes

of Interest.

The St. John exhibition made a phemomenal record in the matter of attendance on Monday and yesterday,
So far, St. John people have turned out
in unprecedented numbers, and with
the influx of hordes by excursion trains
from all parts of the maritime provinces for the balance of the week, all
indications point to that measure of
patronage which the mexits of the exhibition honestly demands.

The AMUSEMENTS.

The two shows in the Amusement
Hall did an excellent business yester
day despite the outside attraction, the
ball game. In the afternoon the Lukin
Brothers, four in number, made their
first appearance and created an excellent impression. Their act is one of
the most sensational outdoor features
ever seen in this city. On elevated
horizontal bars some 20 feet from the
platform, two of the brothers having
heads down, the other two in turs
spring from the net spread a few feet
above the stage, and clasping the outstratched hands of one of the suspend
ed men, is whished disout in a manner
that makes one dizzy. The concluding
act is very thrilling. One of the brothers, the lighter of the four, after z
few preliminary turns, is swung full
length between the suprights, and att
the completion of the full turn is fairly hurled at the man on the other bar,
who nearly catches him, and after
swinging far back deposits him by z
a series of graceful moves easily in the
net underneath.

The first exhibition of fleevories was
given last night. The rog of the early

The first RANGE, SEA GIRT, N. J., Sept.

AND DIME THE RANGE SEA GIRT, N. J., Sept.

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The fi

THE FIRDWOTKKS LAST NIGHT.

The figst exhibition of ficeworks was given last night. The rog of the early part of the evening rather marred the complete success of the above, but nevertheless sufficient to show that the claim of Messra. Hand's representatives, Richard Bewden and S. McDowell, concerning their exhibition was warranted. In variety and quality the present display is the best that has been seen in the city. The programme consisted of flights of rockets, tourbillions, cannon shells and set pleces.

THE BALL GAME. THE BALL GAME.

THE BALL GAME.

The game between the Roses and tleris on the grounds yesterday aftermoon was called in the seventh anning. The score stood Roses 5. Alerts 3, and the hits 7 and 8. The batteries were Howe and Walsh, Phelan and McLean. Considering the nature of the grounds the game was an exceedingly good one. D. McCarthy umpired.

FREDERICTION, Sept. 2.—H. H. Pitts has sold the Fredericton Reporter (newspaper) and printing business to W. M. Clarke, who has been foreman of the mechanical department for several years past. Mr. Pitts has been appointed manager and inspector of the People's Gas Supply Co., with headquarters at Ottawa, and will make his home at the federal capital.

## SPORTING NEWS.

Yesterday's American League Games.
At Chicago—
At Chicago—
Chicago
Chicago 

# SHIPPING NEWS.

LATE SHIP NEWS.

Demestic Porte HALETAX, Sept. 2.—Ard, sir Nethergate, rom Newport News, Va. Clearer, str Florence, for St Jehn.

AYR, Sept. 1.— Ard, ship Hawre, from ewenstle, N B. N. B. YOKOLAMA, Sept. 2.— Str Empress of stpan arrived here from Vancouver at 8.30 y sterday morning.

CAPE TOWN, Aug. 2.—Ard. str cWinifiedan, from Halifax.

HARTPIART, Sept. J.—Ard. str Habil, from Halifax to Queenstan (in tow).

MANCHESTER, Aug. 31.—Ard, str Lafarl. thue, from Parrsborg N. S.

SOUTHAMPTON. Sept. 2.—And str Philadelphia, from New York.

Soreign Posts.

CITY ISLANP, Sept. 2.—Bound south, sch Viseyard, fram Two Risers, N. S.

BOOTHBAY HARBOR, Me., Sept. 2.—B.

BOOTHBAY HARBOR, Me., Sept. 2.—S.

BOOTHBAY HARBOR, Me., Sept. 2.—S.

Salied, tug Springhill, towing barges No. 2 and 5, for Portland.

CADIZ, Aug 28—Sid, bark Mary Classen, for Gaspe, PQ.

STONINGTON, Cean. Sept. 2.—Ard, sch. Andrew Peters, from Calais.

VINEYALD HAVEN, Sept. 2.—Ard, sch. Abbie and Eva Hooper, from St. John for Philadelphia; Geneview, from St. John for Boston, S. Gr. Newark.

NEW YORK. Sept. 2.—Ard, sch. Sch. KEW YORK. Sept. 2.—Ard, sch. Hortensia, from Spencer's Island, NS, for New York: Lenn Maud, from St. John for Boston; Valetta, Frandora and Paney, from Vork: Lenn Maud, from St. John for Boston; Valetta, Frandora and Paney, from Lavotento, John Mary, Stlant, from Lavotento, John Mary, Stlant, from Lavotento, John Mary, Stlant, from Lavotento, from Calais for do.

BORDEAUX, Aug 29—Ard, str Briardene, from Halifax.

## COMMERCIAL.

BTOCK MARKET.

DRK, Sept. 3.— Wall Street—The the market well in hand at the dilfted prices of various leaders by above yesterday's close. Prices were a good fraction higher, parennsylvania, Southern Pacific and Reading opened with a resumption by a enormous dealings, the first a representing 20,000 shares at lown to 75, compared with yester-figure of 75%. Southern Pacific i wide, 6,00 shares being bought to 80%, a gain over night of oint. Trading was very active widely distributed.

EXPLIENT.

NEW YORK, Sept. 3.—Cotton: Futures opened firm. September, 8.52; October, 8.51; November, 8.36 bid; December, 8.42; January, 8.41; February, 8.32; March, 8.33; May, 8.36.

DAILY QUOTATIONS.

day's day's chay's chay's chay's chay's chay's characteristics of the characteristics of th 341/2 495% 4236 35% Missouri Pres. 1178,
N Y Cettral. 1165
N Y Ont and West 2645,
Norfolk and West 2645,
Norfolk and West 2645,
Pen R. 16534
Pen Gas L and C. 26444
Readins. 2653,
Read Co, 1st pfd.
Read Co, 2nd pfd. 7934
Southern Pae Co. 7934
Southern Railroad 40
Teun Coal and 1
Texas and Pae 5442
Dinon Pacific. 11136
Undon Pacific. 11136
Undon Pacific. 11176
Undo 413% Wabash, pfd ..... 4814 West Union Teleg. 951/2

Miss W. L. Fowler and Miss W. W. Up-ham left hast evening for New York, after spending a phrasant vacation at Miss Up-

the writer, has spent 11 years in UncleSem's territory, most of the time in active
newspaper week.
Albert \*\*E. Sears of the Bank of Montrerdi
edant at Sydnry, Cape Breton, who had been
spending fits holidays at home in St. John,
bet for Sydney on Saturday night. He spent
Sunday with 'friends in Halifax en route.
James H. Spencer of the pest office department, 'Oshwa, is in St. John on a visit.'
Beatwick.

His Lordstap Bishop Kingdon, Yen, Archdeacon Kveires, Rev. Canon Richardson,
Judge Barnington, Dean Partridge, G. O.
Dickson City, and W. M. Jarvis left last
evening for Montreal to

WHET WOMEN ARE DOING.

WHET WOMEN ARE DOING.

A young seeman matriculated this year at Lordon University with first class bonors, who was originally a pupil in an East London clementary school. She passed thence with a schelarabil to a higher grade school, and after taking the Cambridge junior and senior local examinations she distinguished herself as stated above.

Miss Charlotte E. Ainsile has been appointed head of the George Watson Ladies! College, Edinburgh, and is the first woman to obtain such an appointment. Miss Ainsile ro-evieved har early education at the George Watson College and her degree from St. Andrew's, where she took honors in several control of the control of t

MARRIAGES.

SPIERS-ROGERSON—At the home of the bride's parents, No. 1 Carleton street, Sept. 2nd, by the Rev. J. A. Morison, F. H. D., Robert M. Spiers, of Worcester, Mass., to Mary, eidest daughter of Mr. John Roger-son of this city.

#### Stop Buying Millinery Velveteen for Skirt Binding.

When you buy 3/8 of a yard of velveteen to cut into strips for skirt binding, 10 times out of 11 a velveteen is sold you that was never intended for skirt-edge wear. It was woven for trimming hats, etc. S. H. & M. Redfern—a

bias corded velvet — is If you do not find the letters manufactured expressly for skirt bindings, fast dyed and dweller made from velveteen on the back of Bias Velveteen or Brush
Edge Skirt Bindings they are not the best. dved and durable.

## MORNING'S NEWS.

is set down for September 16.
Bicyclists and all athletes depend on BEENTLEY'S Liniment to keep their joints limber and muscles in trim.
W. C. R. Allan and Isainh W. Holder are the candidates for alderman-atlarge in the election to be held next Tuesday.
Robert M. Spiers, of Worcester, Mass, and Mary, daughter of John

Tuesday,
Robert M. Spiers, of Worcester,
Mass, and Mary, daughter of John
Rogerson, of the customs, were united
in marriage at the home of the bride,
Carleton street, yesterday, by Rev. Dr
Morison. They will reside in Wor-

Morison. They will reside in Worcester.

Lieut. Governor Snowball and party witnessed the baseball game at the exhibition grounds yesterday afternoon.

Some one broke into the drill shed of No. 2 Co., 3rd Regt. C. A., Carleton, on Monday night or yesterday morning, and made away with a couple of pairs of uniform trousers.

The Bijou Theatre is still drawing crowded houses and all the favorites are winning renewed applause. Tonight a complete change of programme will be given, when some new and startling acts are promised.

Str. Manchester Trader will, it is expected, sall from here Saturday for Manchester via Charpttetown. She will take in here 700. standards of deals, 600 tons of pulp, 1,500 boxes of cheese and some general goods. At Charlottetown she will receive cattle, sheep and cheese.

town she will receive the cheese.

T. H. Estabrooks has retained Attorney General Pugsley, and will apply for a writ of injunction to prevent J. J. McGaffigan from using on his tea a name which Mr. Estabrooks holds by copyright. The name is Red Rose, and Mr. McGaffigan's tea Tea Rose.

PROVINCIAL. There are upwards of twenty cases of smallpox in one district of Kent coun-

ty.

Burglars got \$20 from the store of
Turner Bros., Sackville, Monday night.

The Woodstock exhibition will be held
on September 24, 25, and 26.

LEGS CAN'T STAND IT.

The leg has its own woes, to which it falls helr from the legacies of exercise. Grooms and cavalry officers are inclined to have bowlegs and to "toe in," parrot fashion, as is admired in Japan and in Indian land. Priests, magistrates and all who wear skirts drag their legs in walking instead of raising them, as do soldiers and correct pedestrians. Dancers of ballet who have worked hard at pointing raising them, as do soldiers and correct pedestrians. Dancers of ballet who have worked hard at pointing have an internal deviation of their bones from rectitude known as "onlon." Scrukwomen who pass much of their lives on their knees have a swelling of the knee joints. "Dentists' leg' is a result of everstrain, fatigue and prolonged muscular contraction. Another instance of muscular trademarks is found among file cutters. They overexert the right hand in their work with the hammer. The hand and wrist finally weaken and shrivel. The pressure of the chisel against their thumb stunts the growth of that member and bends it beckward.

A COOL CHINESE THIEF.

A COOL CHINESE THIEF.

The cool impudence of Chinese thieves is proverbial. A writer gives a case in point. The courthouse at Signapore boasted a very valuable clock suspended from the wall directly opposite the bench. One day during the session of the supreme court a particularly meek looking Chinaman entered, carrying a ladder. Removing his hat and bowing to the bench with utmost gravity, he proceeded to remove the clock with humost gravity, he proceeded to remove the clock with businesslike expedition. Tucking the clock under one arm and the ladder under the other, he passed out unchallenged, every one present regarding him as a coolie sent to remove the clock for the purpose of cleaning it. Several days passed, and, the clock not being returned, the magistrate reported the delay to the public works department. The P. W. D. knew nothing whatever about it, and neither clock nor coolie was ever heard of again.

PARENTAL FORESIGHT.

PARENTAL FORESIGHT.

"Yes. I'm encouraging my daughter to keep company with that Arctic ex-

"He'll be able to stand it in the par-lor without out fire next winter."-Cleveland Plain Dealer.

IMPRUDENT MAN.

Young Lady (who has just had ber picture taken)—"I hope that the pictures wih be handsome."
Photographer—"Yes, indeed, you will not recognize yourself."—Chicago News.

OURSELVES AND OTHERS. The world seems to be divided into two classes; those who board, and envy those who keep house, and those who keep house and envy the boarders.— Atchinson Globe.

PIS SHORT NAME.

"Now that we're engaged," she said "of course I can't call you Mr. Parkinson; and even Schartlan seems too long and format! Haven't you any short pet name?" Haven't you any short pet name?" the college used to—cr—call me 'Pieface."—"hidadelphia Fress. THE WAY A WOMAN BEGINS. "Have you finished that new novel yet?"
he asked.
"Oh, dear, no. I've hardly begun," she
nswered. "In fact, I've only read the last
chapter."—Chicago Post.

AN APPETIZER. Gentleman (at restaurant)—I say, waiter, your customers are a fearfully noisy lot!
"Yes, sir, and yet they are so particular, you would scarcely believe. Why, that same turbot you are eating just now no fewer than six of them refused before you came in."

CARRIE NATION IN BANGOR. One of the most unique characters in the present day history is Mrs. Carrie Nation, the famous "Kansas Smasher," who gave her native city such a "cleaning" a short time ago. Mrs. Nation will make her first appearance in Bangor in City Ha I Priday appearance on the will be compared to the co

THE WINNIPEG BOOM.

## CANADIAN PACIFIC

THE SHORT LINE TO THE

TORONTO EXHIBITION. -ONLY ONE NICHT ON THE ROAD. lickets on sale Sept. 2nd, 4th, 6th and 9th RATE FROM ST. JOHN, \$20.55.

RATE FROM ST. JOHN, \$16.50. All tickets good to return until Sept. 18th. D. P. A., C. P. R., St. John, N. B.

SECOND SERIES XCURSION 10,000 MORE

Farm Laborers Wanted FOR HARVESTING IN MANITOBA and ASSINIBOIA.

Excursion Sept. 8th from

all points in maritime previn Going rate, \$10.00. Returning rate, \$18.00. For all particulars apply to

C. B. FOSTER, D. P. A., C. P. R. St. John, N. B.

LIVERY STABLES.

#### HAMM'S LIVERY STABLE

134 Union Street. Telephone 11.

A Ten Seated Waggonette will call every morning at the Hotels for a drive to points of interest about the city.

DRIVING OUTFITS and COACHES for hire at any heur.

DAVID CONNELL,

BOARDING, HACK AND LIVERY STABLESS.
45 and 47 Waterloo St., St. John, N. B.
Horress boarder on Reasonable Tremss.
Horses and Catagor on Hire. Pine Fix-outs
at thort notice.
A large bugk-bard wagon, seats fitten tetwenty people, to let, with or without horses.
Telephone 98.

DAVID WATSON,

OARDING, HACK AND LIVERY STABLES Coaches in attendance at all boats an

91 to 95 Duke Street. Tel. 78

HOTELS HOTEL DUFFERIN.

2. Lekov WILLIS, St. John, N. B.



CHINA TREASURES

are usually acquired piece by piece, odd or in sets. We have some fine "pick-ups" for you. And they're rare bar-gains. Exquisite designs and dainty decorations in china and glassware at amazingly low prices.

## C. F. BROWN. 501-505 Main Street.

DESTRUCTION BY LIGHTNING

NEWPORT, Me., Sept. 2.—Extensive damage resulted from a heavy electrical storm passing over Newport, Dexter and Cambridge at 9 o'clock Monday night. A dozen buildings were id the small amount of town fire-fighting apparatus at hand was powerless to render material assistance. The loss is estimated above \$10,000, with only a partial insurance. The losses

are:
At Dexter, William Arno, farm buildings, three horses and eight head of cattle, \$2,000, no insurance.
At Cambridge, E. D. Hargills, farm buildings, \$1,000, no insurance: Ozear Gray, farm buildings, \$6 tons of hay and some stock, \$3,000; insurance \$1,200; Charles Thompson, farm buildings, \$1,500, insurance \$1,100.

FOUND DROWNED. The body of Robert Pyke, of Kentville, was found floating in the Annapolis river at Annapolis yesterday, morning. He was more than 60 years of age. He had arrived there to take in the Labor Day celebration and is supposed to have walked down on theraliway bridge and fallen over into the water.

DISCOUNTING IT.

He-liere's a story of a surgeon who am-putated his own thumb. Wonderful, isn't it?

it?
She-Oh. I don't know.
He-Just think of his nervo and the awfulpain he must have suffered.
She-But no doubt he put himself under
the influence of ether first.--PhiladelphiaFress.

EDITORIAL ROOM WIT.

The reporter had just come in from a murder care. It was a rainy day, and he had to cross a ploused field on foot.

"I see," observed the chalf editor, looking with much displeasure at his large modely boots, "you have brought the scene of murder with you."

"Yes," answered the reporter apologetically: "I've not to have some ground for my story, you know,"—London Enguess.