

GERMANY'S BIG CANAL.

To Connect the North Sea with the Baltic—A Great Engineering Feat.

The cutting of the ship canal through the province of Schleswig-Holstein to connect the North Sea with the Baltic is progressing rapidly, and it is believed that it can be completed by April, 1893, or a little more than six years from the day on which the first spadeful of soil was turned in the presence of Emperor William I. at Holtenau, near Kiel. Since the sixteenth century sixteen plans have been urged for connecting the two seas, and the last two form the basis of the project now under way. The canal is about sixty-one miles in length, beginning at Holtenau, on the Bay of Kiel, and terminating near Brunsbuttel, on the River Elbe.

As the mean water level of the North Sea is considerably higher than that of the Baltic, both openings are to have huge locks. Near Rendsburg is to be another lock to connect the new canal with the old Eider Canal. The medium water level is to be about equal to that of Kiel harbor, and the locks at the outlet on the Baltic are to be open nearly always, or except during periods of considerable variations in the water levels. At the lowest tide the navigable width is to be about 119 feet, so as to allow the largest Baltic steamships to pass each other. The movements of war vessels and the largest vessels of the merchant marine were considered in making the curves, because they cannot pass a curve with a short radius. Between two counter curves a straight line has been drawn for safe navigation. A speed of 5.3 knots is admissible. About sixty-three per cent. of the canal has straight lines.

From Holtenau to Rendsburg the line runs through a very undulating country, and there it has the greatest number of curves. In front of the outlet into the River Elbe is to be a roadstead. In cutting through about nine miles of the watershed of the rivers Elbe and Eider an excavation of about ninety-eight feet to the bottom of the canal is required. Between Rendsburg and the Baltic a ridge must be cut through, and just beyond Rendsburg the upper Eider lakes must be lowered for the canal to pass through. The flow of the canal is toward the Elbe, but at high tide in the Elbe it will discharge into the Baltic Sea. The banks are to have stone packing to diminish the force of the waves.

About 7,000 workmen are employed in the construction. They are in 38 camps, of 160 to 500 men each camp having its own executive office and sleeping barracks. The common laborers get about seventy cents a day, and the foremen and skilled laborers get from ninety-five cents to \$1.15 a day. The mechanical appliances are 27 dry dredgers, 24 floating dredgers, 97 locomotives, about 62 miles of track, 2,700 dirt carts, 4 elevators, 15 steamboats, 51 receptacles for dredging implements, and 37 steam pumps. Along the line are several forges and two brick yards. The total cost is fixed at about \$37,128,000. About one-third of that amount was paid by the Russian Government before the work was begun. The rest is to be paid, as required, by the German empire. The construction is under the management of the Imperial Canal Commission.

The regulations for the working of the canal have been adapted to the traffic to be anticipated. The traffic between the Baltic and the North Sea, including vessels from a greater distance, embraced, on the average from 1871 to 1880, through the Sound, 35,246 vessels; through the Belts, 4,000 vessels; through the Eider Canal, 2,258 vessels, or a total of 41,504 vessels. Of that traffic four-fifths, it is believed, may be counted on for the canal in the near future. About twenty-seven steam vessels and thirty tows of three to four sailing vessels, moving in one direction, can go through in a day. The time saved by a steamship running between Kiel and Hamburg by way of the canal is estimated at two days and a half. The time of passage through the Canal, including stoppages and delays is to be about thirteen hours. Germany's naval ports at Kiel, on the Baltic, and at Wilhelmshafen, on the North Sea, can be within easy access after the completion of the canal, whereas now a squadron is three days from port to port.

Four railroads cross the line of the canal, but three of them are to be conducted over it by turn bridges and one by a suspension bridge near Grunthal. For two of the much frequented country roads turn bridges are to be built, and for the others sixteen ferries are to be provided.

Boulanger and the Princess Carlotta.

Reminiscences of Boulanger are coming forth every day. Here is one that relates to the beginning of his fortune. He was with Marshal Bazaine in Mexico when Napoleon III. was hoping to establish an empire there. The Princess Carlotta and her husband were holding court there at the same time. The Princess was a daring rider, and whenever she left the city for a ride she would gallop over the plains in a straight direction for miles, but no one of the court imagined that she was in danger at any time.

One hot afternoon Boulanger, who was then a Captain and had command of the guard at the principal gate of the city, had just rolled a fresh cigarette and was about to light it when he saw a small cloud of dust in the distance, and he waited for the rider to approach nearer, supposing him to be a courier. But a few minutes afterward he saw that the galloping rider was the Princess Carlotta, and that she was being pursued by a small body of horsemen. He believed that the Mexicans were trying to capture her as a prize. Throwing away his cigarette he summoned the guard, ordered the gate thrown open, and rushed down the roadway, forming his men in line as the would-be kidnappers advanced. The Princess galloped furiously onward and reached the gate in safety. Boulanger and the guard fired at her pursuers, and they, seeing that the Princess had escaped from them, turned and galloped away. For that act it is said, Boulanger was made a Mexican brigadier by Maximilian. When Boulanger returned to Paris Napoleon greeted him very cordially and spoke of the incident. From that day he was a favorite.

We consider it tedious to talk of the weather, and yet there is nothing more important.—[Auerbach.]

It is a beautiful thought that, however far one shore may be from another, the wave which now ripples over my foot will in a short time be on the opposite strand.—[Wilhelm Von Humboldt.]

ARE WE TO BELIEVE ANYTHING?

How Many Nice Old Tales Are Rudely Dispelled Nowadays.

The literary iconoclasts are so many in these latter days that doubt is being thrown on the truth of the existence or the fate or the sayings of quite a number of historical personages.

They are raising at this time new statues in France to Joan of Arc, the heroic peasant girl of Domremy, who, after leading the troops to victory against the English, was taken prisoner, tried and condemned as a heretic and sorcerer, and was burnt at the stake in the market place at Ronen. We are now told by more than one French writer that she was not burnt, but pardoned and released, and that she married and became the mother of a family.

They have just been celebrating in Switzerland the sixth centenary anniversary of the independence of that Republic, and in the great parade of historical personages were William Tell and his son, having the mythical apple that Tell is alleged to have shot from the child's head with a crossbow in the market place of Altdorf.

We are now assured that the story of Tell is a myth, that there was no Tell, that he did not shoot an apple on the head of his son by order of Gessler, the Austrian bailiff, and that Gessler was a good administrator and a merciful man.

The infamous Lucrezia Borgia is declared by Roscoe, the English historian, and by Mr. Astor of New York, to have been a good and much-maligned woman. The famous Sappho did not throw herself from the Leucadian Cliff for love of Phaon, nor did she live a low life, but married and lived respectably and was respected, according to the German writer Weicker, who wrote a book to prove her innocence. Bishop Thirlwall and Lord Lytton both believed in the purity of her character.

The slaughter of the rear guard of the army of Charlemagne, immortalized in the Norman French epic "Chanson de Roland," was not the work of the Moors of Spain, as declared for centuries in song and story, but of the wild Gascons, who descended from their mountains and fell upon Roland and his knightly followers and men at arms and massacred them to the last man.

Washington did not cut down the young cherry tree with his little hatchet.

Shakespeare's hunchback Richard III. was a well-proportioned man. Cambronne did not say at Waterloo, "The guards die, they never surrender," nor did the Duke of Wellington at the crisis of that battle turn to his English soldiers and say, "Up, guards, and at them!" Yet history records these things, and the legends will live in spite of all the destructive criticism.

Foreign Army Notes.

Austria's ability to handle immense bodies of troops easily in railway transportation was demonstrated in the recent manoeuvres near Schwarzenau. In thirty-six hours the Franz-Joseph Railway carried 70,000 men from the scene of the sham battle without a single accident or delay.

The Russian manoeuvres near the western boundary were held in the military district of Warsaw in September, but so secretly that the details are still unknown to the Continental public. Gen. Gourko had charge of the manoeuvres, which involved 85 battalions, 60 squadrons, and 224 guns. The total number of combatants was 75,000. Gen. Krshivoblozki of the Fourteenth Corps and Gen. Mirkovitch of the Fifteenth Corps were the opposing commanders. The most important and significant sham battle took place on the Vistula, and its object for the attacking party the crossing of the river and for the defending party was the frustration of the attempt. All the improved accessories of war, like the balloon, the telegraph, and telephone, were used at these manoeuvres.

Late in September the Government and its officers at Bucharest were much disquieted by the manoeuvres of Russian troops beyond the Pruth. In upper Moldavia Russian force now number 100,000. These troops are exercised by night on long forced marches and by day in target practice. All night manoeuvres are conducted with the aid of electric lights. Although Roumania's official press seldom mentions Russia's activity in Bessarabia the Roumanian Government has its spies out securing detailed information of all that its big neighbor is doing near the border. Reports of its experts on a new repeating rifle and smokeless powder have been hurried to completion and submitted, and before January the chasseur battalions at least are expected to lay aside their Martini-Henry rifles for more deadly weapons.

Russia's budget for 1891 called for a military appropriation of 226,652,168 roubles against 222,041,314 last year and a marine appropriation of 43,759,924 roubles against 39,193,533 last year. Largely by such increases of appropriations for military and navy Russia's total expenditures have been raised from 605,540,392 in 1880 to 962,302,521 in 1891. Austria's army and navy budget for 1891 was \$3,000,000, to which must be added almost \$6,000,000 for the militia, and to all this will probably be added for next year about \$3,000,000 or \$4,000,000, which a commission in Vienna is said to have decided to be necessary for reforms in the standing army and marine. In 1880 Austria's expenditure for these purposes was about \$4,000,000. Germany's budget for the financial year 1891-92 calls for \$120,500,000 for the army and almost \$16,000,000 for the navy. Five years ago the corresponding appropriations were \$93,000,000 and \$10,500,000.

In the Austrian manoeuvres before the Emperor of Germany the new cavalry telegraph, the latest mechanical innovation in military matters in Europe, stood its first trial, to the satisfaction of the general staff. The telegraph was in charge of the two non-commissioned officers in each regiment. Each of these "telegraph patrols" carried a box on each side of his saddle, one with the battery and the other with wire and other small apparatus. Thirteen miles of wire for telephoning or telegraphing can be laid by two such officers in two hours, and the officer in advance is then expected to communicate immediately to his comrade with the regiment the results of his scouting expedition. This rapidity of execution is due to the fact that the wire needs only to be unrolled from great spools of 600 yards each as the rider gallops along, and to be occasionally made fast merely to fence posts or trees, or simply laid in a gutter beside the highway. Every one of the forty-one cavalry regiments in the Austrian army will have hereafter its telegraph patrol.

HE SAID HE WAS THE SULTAN.

An Adventurer who Deceived Some Europeans, Though He Couldn't Fool the Natives.

It would be supposed that in a despotic country like Morocco, where heads tumble on slight provocation, an abrupt end would be made to the career of an adventurer who assumed to be the rightful Sultan. Such an impostor, however, actually flourished in Morocco in 1878-79, and the authorities of that State would perhaps have let him alone to this day had there not been phases of his rascality which they took more seriously to heart than they did his assumption of the rights of the Sultan.

He suddenly appeared in Tangier. No one knew whence he came, but he had a long story to tell of his wrongs and his determination to right them. He said his name was Abdallah Ben Ali, and that he was the rightful heir to the throne of Morocco. He proposed to arouse public sentiment in his behalf, convinced that he could establish the justice of his claim, and that Morocco would some day recognize him as the Sultan. He had quite a large establishment. Besides his English wife, he had a secretary and an adjutant and a large number of servants. Abdallah asserted that he was a native Moroccan, and the success with which he imposed upon the European part of the population proves that he played his part skilfully.

It was not ascertained for months that he was in fact a Frenchman who had served as an officer in the French army under the name of Ferdinand Napoleon Joly, that he had been compelled to flee from Paris and from Brussels on account of swindling operations, and that he had picked up his knowledge of Arabic in Algeria, and finally spoke it so well that with the aid of Moroccan attire he was able to pose as a native. The Moroccan Government paid no attention to Abdallah. He was regarded by the Sultan's officers at Tangier as a wind bag who would like the notoriety of being prosecuted for his pretensions. But another phase of the matter soon developed.

It was found that he was deceiving a good many of the Europeans of Tangier, who actually believed there was truth in his story, and the more the Moroccans laughed at him as an impostor, the more sympathy they felt for him as a victim of injustice. He was a plausible fellow, but, notwithstanding his adroitness, it is remarkable that he so completely deceived some of the people he met. He succeeded in borrowing a considerable sum of money from the Spaniards in the city, and in other ways turned his pretensions to profitable account. The caprice of his swindling operations was when he made a contract with an English firm, in the name of the Moroccan Government, to supply him with 50,000 stand of firearms. He received from this firm a considerable amount of cash down for giving them the contract.

About this time, the Moroccan authorities thought it best to interfere and Abdallah was thrown into prison, and measures were taken to learn his antecedents. His real history was brought to light. He, however, stuck to his story that he was a Moroccan prince defrauded of his rights. When his day of prosperity was over, his English wife fled to England with his secretary and a large part of his ill-gotten gains. The pretender to the throne in a few months succumbed to the pestilential atmosphere and improper food of his prison cell. His dupes had been entirely among the Europeans, for the Moroccans from the first had made no mistake as to his real character.

The London Police Force.

The Metropolitan Police Force has to deal with disorder in the streets, prosecutions under the Indictable Offenses act, the prevention of Indictable offenses, summonses under the Summary Jurisdiction acts and special acts, convict supervision, the regulation of common lodging houses and public houses, the licensing of hackney carriages and hackney carriage drivers, besides robberies, nuisances, assaults, riots, and a host of other important matters under no less than 126 acts of Parliament, of which full particulars are given in the guide; and among all thinking persons it must be a subject of wonder that men leading so laborious a life can master the details of all this legislation in such a way as to give general satisfaction to the community. They watch over an area extending roughly to a radius of about fifteen miles from Charing Cross as a centre, exclusive of "the City of London," which covers a little more than one square mile.

The Metropolitan Police district embraces an area of nearly 700 square miles, extending from Colney Heath, in Hertfordshire, on the north, to Mogadore, Todworth Heath, on the south, and from Lark Hall, Essex, in the east, to Staines Moor, Middlesex, in the west. The following constitute only a portion of the labors of the Metropolitan Police during the past year. They apprehended 83,414 persons, received 19,421 reports of criminal offenses, recovered £21,666 worth out of £99,841 worth of property stolen, made 6,047 inquiries for Government departments and provincial and Continental police, found and restored to their friends 11,540 persons out of 23,042 persons reported missing, attended 1,311 fires, summoned for various offenses 226 refreshment-house keepers, 9,091 drivers of hackney carriages, carts, &c., 14 common lodging-house keepers, 53 offenders under the Smoke Nuisance acts, and 5,623 persons for miscellaneous offenses, and they served 88,446 summonses applied for by private persons. The authorized strength of the force at the beginning of the present year was 15,264, of whom some are employed on duties for various Government departments, including special protection posts at public offices and buildings, dockyards and military stations, &c., leaving 13,600 available for service in the metropolis. The pay of the force during the year 1890 was £1,206,287, which appears very moderate when it is considered that the ratable value of the area for the year was over £35,000,000, and the actual value of the property under the charge of the police at least forty or fifty times that amount.

Member of the Legislature.

In addition to the testimony of the Governor of the State of Maryland, U. S. A., a member of the Maryland Legislature, Hon. Wm. C. Harden, testifies as follows: "746 Dolphin St., Balto., Md., U. S. A., Jan. 18, '90. Gentlemen: I met with a severe accident by falling down the back stairs of my residence, in the darkness, and was bruised badly in my hip and side, and suffered severely. One and a half bottles of St. Jacobs Oil completely cured me. Wm. C. HARDEN, Member of State Legislature."

OVER THE BRIDGE.

Saved by Riding in the Rear Coach.

Why do I always ride in the last car of a railroad train? Well, I have a reason for it, which I'll tell you if you care to listen.

It was several years ago, before I left England, I was earning my living as a "commercial," and had been on a long trip through Lancashire, I had got as far as Bolton, and almost made up my mind to spend the night there, when I found that several fellow salesmen were going on the 7.20 p. m. train to Halifax, so I decided to join them.

It was a fearful night. The wind blew a perfect hurricane and the rain came down in sheets, but we fellows did not mind it much. We beguiled the time by telling stories of our business experiences, and had almost reached Preston when the talk accidentally turned on railroad accidents.

"What fools we are to travel in the last compartment!" said my friend J—. "Suppose a train came crashing into us, we should all be ground to powder."

"Suppose it the other way about," I rejoined, "and that we occupied a front carriage and went smashing into a train ahead of us. We should be sent to kingdom come just as quickly. But J— was in argumentative mood, and he showed how, in that case, the engine would be in front of us and would break the force of the concussion.

The subject lasted until we reached Preston, when J—, who had long been hankering for a cigar, got out to look for a smoking compartment.

"Any of you fellows want to come?" he asked, but as we all declined to stir he went off alone.

The full force of the wind struck us as we glided out of Preston Station, and the train fairly rocked beneath its pressure.

"We will catch it as we cross the bridge," remarked one of the company. "The wind has a clean sweep up the river and will be almost strong enough to carry us over."

"No fear of that," said I, "that bridge has stood many worse storms than this, and will stand many more."

The words were scarcely spoken before there was a heavy grating sound, the car in which we were seated seemed to be lifted bodily from the rails and to fall back again with a bump, and then to come to an abrupt standstill. We flew to the windows and peered out into the pitchy darkness. The faint glimmer of light from the car windows showed us that we were tottering on the very verge of the river's bank. The bridge was gone, so were the engine and the six cars which had made up the rest of the train.

From the inky blackness below came up the shrieks of the injured and the deadly hissing of the water heated to boiling point. Fancy the agony of the occupants of the first compartment, some of whom had escaped being crushed to death only to be boiled alive literally by the dense volume of steam which came from the engine beneath.

The breaking of the coupling chain just in the nick of time alone had saved us from adding our cries and groans to those below. The engine and the first of the carriages had formed, as it were, a foundation in the bed of the river for the others to rest on, but the concussion had smashed them out of all semblance to their former shape, and the unfortunate occupants were crushed and battered beneath the heavy wheels and timbers. It is useless to attempt to tell of the sad work of getting out the bodies. The river at this point was very wide and comparatively shallow, and the current was not strong enough to wash away the mass of debris or to allow the imprisoned bodies to float down stream.

The list of the killed grew with every hour, comparatively few of the occupants of those fatal cars being taken out alive.

I stayed till J—'s body was recovered, late in the afternoon of the next day. His cigar was held tightly between his clenched teeth. Poor fellow; he had always been fond of a good cigar, and he paid for the last one with his life. The hardest task I ever had in my life was breaking the news to his wife. Poor girl; it broke her heart. She only lived six months after. Did the bridge go with the cars, or before? Why, it was never known for a certainty, but every one believed it went first, and that the cars plunged over in the darkness.

And that's why I have a prejudice in favor of rear cars.

PROGRESS IN SCIENCE.

The method of determining specific heats by the use of Joule's law has only been successful in liquids which were good conductors. A new method has been adopted for such measurement by means of a glass spiral filled with mercury.

The new Maxim flying machine will be propelled by a light screw making 2,500 revolutions per minute. Its suspending power will be a kite 110 feet long by 40 feet wide. The motive power will be a petroleum condensing engine.

A recent eruption on the sun's face was photographed and lasted for fully fifteen minutes. Its angular height showed it to be a disturbance causing the vapors to ascend fully 30,000 miles.

The camera and an ordinary oil lamp are now being used to produce photographs of the indicator cards in steam engines, by which the working of the engines can be seen and studied at all times.

The wear upon the Cape Cod coast is shown to be at the rate of 755,756 cubic yards per year, or an annual wear of the coast equal to a distance of about eight feet.

Theoretical researches in dynamics do not indicate that any vapor whatever is capable of giving more than 5 per cent. of increase in economy over steam.

King of Medicines

A Cure "Almost Miraculous."

"When I was 14 years of age I had a severe attack of rheumatism, and after I recovered had to go on crutches. A year later, scrofula, in the form of white swellings, appeared on various parts of my body, and for 11 years I was an invalid, being confined to my bed 6 years. In that time ten or eleven sores appeared and broke, causing me great pain and suffering. I feared I never should get well."

"Early in 1885 I went to Chicago to visit a sister, but was confined to my bed most of the time I was there. In July I read a book, 'A Day with a Circus,' in which were statements of cures by Hood's Sarsaparilla. I was so impressed with the success of this medicine that I decided to try it. To my great gratification the sores soon decreased, and I began to feel better and in a short time I was up and out of doors. I continued to take Hood's Sarsaparilla for about a year, when, having used six bottles, I had become so fully released from the disease that I went to work for the Flint & Walling Mfg. Co., and since then

HAVE NOT LOST A SINGLE DAY on account of sickness. I believe the disease is expelled from my system, I always feel well, am in good spirits and have a good appetite. I am now 27 years of age and can walk as well as any one, except that one limb is a little shorter than the other, owing to the loss of bone, and the sores formerly on my right leg. To my friends my recovery seems almost miraculous, and I think Hood's Sarsaparilla is the king of medicines." WILLIAM A. LEHR, 9 N. Railroad St., Kendallville, Ind.

Hood's Sarsaparilla

Sold by all druggists, 5¢; six for 25¢. Prepared only by C. I. HOOD & CO., Apothecaries, Lowell, Mass. 100 Doses One Dollar

Known and Unknown.

Among the victims in a sad disaster at Leeds, in which, while dressed up for a Christmas entertainment some little children were so burned as to lose their lives, was one little girl who was blinded by her injuries. When four was dusted over the burned surface, so as to exclude the air, the little sufferer felt immediate relief, and said, "I can't see you, but God bless you, whoever you are." God would know the little one's benefactor, and she hoped that God would bless him. How often God is ministering to us by the unknown! Circumstances of which we know nothing as the means of good to us—people who do us good in ways which we can never trace—ay, even afflictions themselves, which we can never recognize as blessings—or, at any rate, not for a long

"German Syrup"

We have selected two or three lines from letters freshly received from parents who have given German Syrup to their children in the emergencies of Croup. You will credit these, because they come from good, substantial people, happy in finding what so many families lack—a medicine containing no evil drug, which mother can administer with confidence to the little ones in their most critical hours, safe and sure that it will carry them through.

Ed. L. WILLIAMS, of Mrs. JAS. W. KIRK, Alma, Neb. I give it to my children when troubled with Croup and never saw any preparation act like it. It is simply invaluable remedy.

Fully one-half of our customers are mothers who use Boschee's German Syrup among their children. A medicine to be successful with the little folks must be a treatment for the sudden and terrible foes of childhood; whooping cough, croup, diphtheria and the dangerous inflammations of delicate throats and lungs.

time—are blessings, and blessed, though we cannot see their ministering hands. One evening a gentleman saw a little girl in front of a fruit stall, and heard her saying, "I wish I had an orange for mother." She and the children with her were neat and clean, and the gentleman gave them all plenty of fruit. "What is your name?" asked one of the little girls. "Why do you want to know?" asked the gentleman. "I want to pray for you," was the reply. The gentleman turned to go, scarcely daring to speak, when the little one added, "Well it don't matter, I suppose; God will know you without your name." Many an one has got great a name among men, but "by their fruit shall ye know them." God grant that He may so know us, and not only by a name!

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