

A CITY OF SALT.

BY WILLIAM G. FITZ GERALD.

If there is any more surprising monument of human labor than Wieliczka's underground city, hewn in the course of ages in glistening rock-salt in the bowels of the earth, one would like to know what it is, and where it may be found. An out-of-the-world place this, in the quiet Carpathian valley of the Vistula, some miles off the Cracow-Lemberg Railroad in Austrian Poland. For ever since railroads came into the world, these peasants refused to permit them near, fearing lest the vibration should cause the upper earth to fall in upon and bury the teeming inhabitants of those strange, crystal, sparkling streets a thousand feet down in the earth, with their little horse-railroads, drawn by congenitally blind animals, who may be said never to have been "in the world" at all, as we know it.

The origin of the rock-salt mines of Bochnia and Wieliczka is lost in the mists of antiquity. They are certainly known as early as the reign of Bela IV., of Hungary, in 1252. During the Tartar invasions they were somewhat neglected, but they were restored to fresh activity by immigrant Hungarians from across the border in the time of St. Kinga.

One thousand years of patient human toil have honeycombed out of the solid salt crust of the earth an entire city at various levels. It consists of an intricate congeries of winding streets and dim scintillating alleys; of pillared churches; diamond and ruby staircases, restaurants, railroad stations, shrines, statues, monuments, and a thousand other wonders—all rough-hewn in the hard, sparkling rock-salt crystals which, lit by electric lights, pine torches, magnesium flashes, or thousands of candles, fairly blaze like a world of precious stones.

The Salt City is not only difficult of access, but the Austro-Hungarian government (it is state property) most jealously guards it; and all workmen are searched several times a day, lest they should be tempted to conceal fragments of rock-salt upon their persons. It is not clear why mere salt should be considered so precious, but the fact remains that all workers are searched as jealously as the Kaffirs in the diamond mines of Kimberley.

The entrance is a long, low, ordinary-looking building, containing the Administration Offices of the mines, and also a small museum of palæontological curiosities, found deep down in remote recesses. Elevators descend the abysses leading to this wondrous city, though many visitors prefer to go down by the long, massive staircase, hewn in the solid salt, which flashes emerald and ruby rays at every step.

One naturally asks why an entire "city" was hewn in the salt, more especially the pillared cathedrals, the altars, statues, and the like. And one learns, naturally enough, that all this patient work chiseled out during centuries, is in the nature of votive offerings from grateful men, whom the salt has yielded what will seem to us a mere abject pittance, ranging from five cents to twenty-five cents a day!

The salt-hewn cathedral of St. Anthony dates from the seventeenth century, and was projected by a pious foreman. Galician miners are deeply religious people. They have their own minister of religion in the depths, and touching prayer services with weird music are held in their rock-salt churches. Also they have their own band for festive occasions.

The high altar in the salt "cathedral" is cunningly adorned with twisted pillars, and it is flanked by salt-hewn statues of St. Stanislaus and St. Clement. On the altar steps are carved in ruby-red rock-salt effigies of two kneeling monks; and in the background of the altar is a huge salt crucifix, before which stands the Virgin placing the infant Jesus in St. Anthony's arms. This, the most extraordinary church in all the world, contains a salt-hewn pulpit, supported by salt statues of St. Peter and St. Paul, and in a niche below stands a glistening statue of the good king Augustus II.

Emulation must have been the secret of all this gigantic work. It seems that no sooner was the first shrine chiseled in salt, the first statue carved, than

succeeding generations of miners, fired with zeal, resolved to see what they also could do in this strange sculpture. Some three hundred feet away from the cathedral is a most wonderful rock-hewn salt cavern in this weirdest of cities. This is the vast "Salle de Danse," the wonderful Lentow ballroom, lit with enormous lustres or chandeliers of wire-hung rock-salt crystals of opalescent hues. These last were added in honor of a visit from the Russian Czar, Alexander I., who (like many other royal and imperial dignitaries) visited the City of Salt with the Palatine of Hungary.

This great ballroom is over three hundred feet in length, and towers dimly to a height of one hundred and ninety feet. Its walls of salt-rock glisten and flash with exquisitely-hued crystals, and there are symbolical statues here and there, representing "Knowledge," "Labor," "Vulcan," and "Neptune"; as well as a special Throne of State at one end, of course hewn in the rock-salt, and kept for the use of the aged Emperor Franz Joseph or the Imperial Archdukes.

There is a triumphal archway in salt over the entrance to the great ballroom, surmounted by a miner saluting, and at his feet is carved in salt-crystals the Polish greeting "Szczęść Boże!"—the equivalent of the German "Glückauf." Whenever an old working is exhausted and closed, or a new "street" opened in the subterranean city, the event is celebrated by a great ball in the Lentow Saloon. Then it is that hundreds of Galician peasant women, wives and friends of the workers below, quaintly clad as a comic opera chorus, take their partners in the vast, rough-hewn salt cavern, while shrill pipes, quaint-sounding flutes, and sweet

one crosses a wooden bridge over a subterranean river filled with blind fish, and in the dim light of torches one beholds another public monument—an obelisk thirty feet high, carved in rock-salt, and recording a visit of the late Crown Prince Rudolph and Princess Stephanie in 1887.

One may but mention in passing the Drozdowice and Archduke Frederick chambers, on the way to the Central Railroad Station, which is named after Count Coluchowski. Here meet all the little trolley lines of the underground city, and it was made a kind of central "Broadway" three centuries ago. Here converge many of the principal streets or galleries of the East Field. The lines are narrow-gauge; and the little cars are drawn by Polish ponies, most of whom have never been on earth at all, and are born blind.

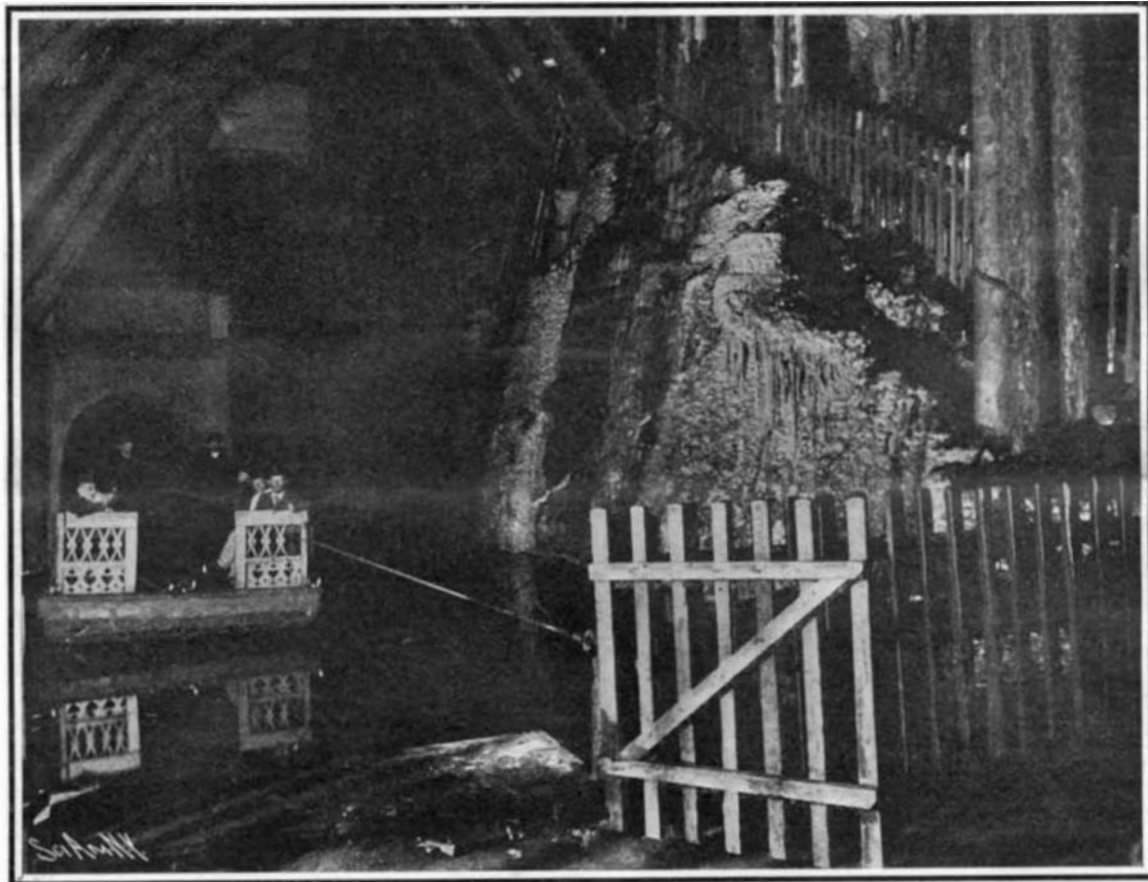
The platform of this "Grand Central Depot" has seating accommodations for four hundred persons, and on holidays its cafés and restaurants are crowded with visitors from the upper world, who eat and drink and enjoy the wild music of the miners' orchestra, which echoes and reverberates strangely through the dim yet sparkling streets.

Nor must we forget to mention the salt lakes of the city, in many places twenty or thirty feet deep, and navigated by ferryboats containing twenty-five persons. These lakes give access to remote and very ancient parts of the city, such, for example, as the Stephanie Grotto, where salt-hewn statues of medieval saints rise strangely out of the dense salt water, girt and enshrined, as it were, by most beautiful salt stalactites and stalagmites. But while admiring these wonders, this patient work of ages, let us not lose sight of the hard life which the poor mining inhabitants of the Salt City are compelled to live. There are some two thousand men at work day and night down here, in eight-hour shifts, and as a rule the men get little more than twenty cents a day. Like the monks of the Great St. Bernard, their allotted span of life is short. The men have a peculiar livid look. They are hollow-cheeked and bloodless—a condition probably due to the action of the salt on the system after years of insidious contact.

Besides floods, falls of salt-masses, and fires—all of which catastrophes take on additional horror down in these depths—another serious danger is the violent explosions of carbureted hydrogen, which may accumulate in newly-excavated galleries. All holidays, political and religious, are celebrated in the City of Salt with a careless élan that blots out all thought of sorrow. There are imposing services in the unique cathedral, dances, picnics, boating parties, and even marriages down in this strange underworld, hollowed out of the rock-salt.

Children are born here, too, and christened. When these grow up, of course they take naturally to the work of their fathers, and help to hew out the hundreds of thousands of tons of rock-salt which is a government monopoly. The men seem perfectly happy; and to see them on a festive day, when the streets are half an inch deep in ruby and diamond-flashing salt-pebbles and dust; when the Emperor may be on his throne in the great Lentow Saloon, and two hundred and fifty Slav musicians directing a perfect orgie of delights—then indeed one would say the citizens of the salt domain need no sympathy from outsiders.

The Interborough Rapid Transit Company, of New York, has just placed an order for fifteen miles of cables insulated with voltax, the new potential insulating compound which has just been placed on the market. This compound, which for the past eight years has been given severe tests, offers so many advantages over rubber insulation that it is rapidly coming into prominence. Recent tests made by the electrical testing laboratories of New York show that this material can withstand a voltage 100 per cent greater than rubber insulation, and has withstood high potential insulation, resistance, and melting point tests that no other compound yet discovered has withstood. The cost of this material is about twenty per cent less than rubber insulation.



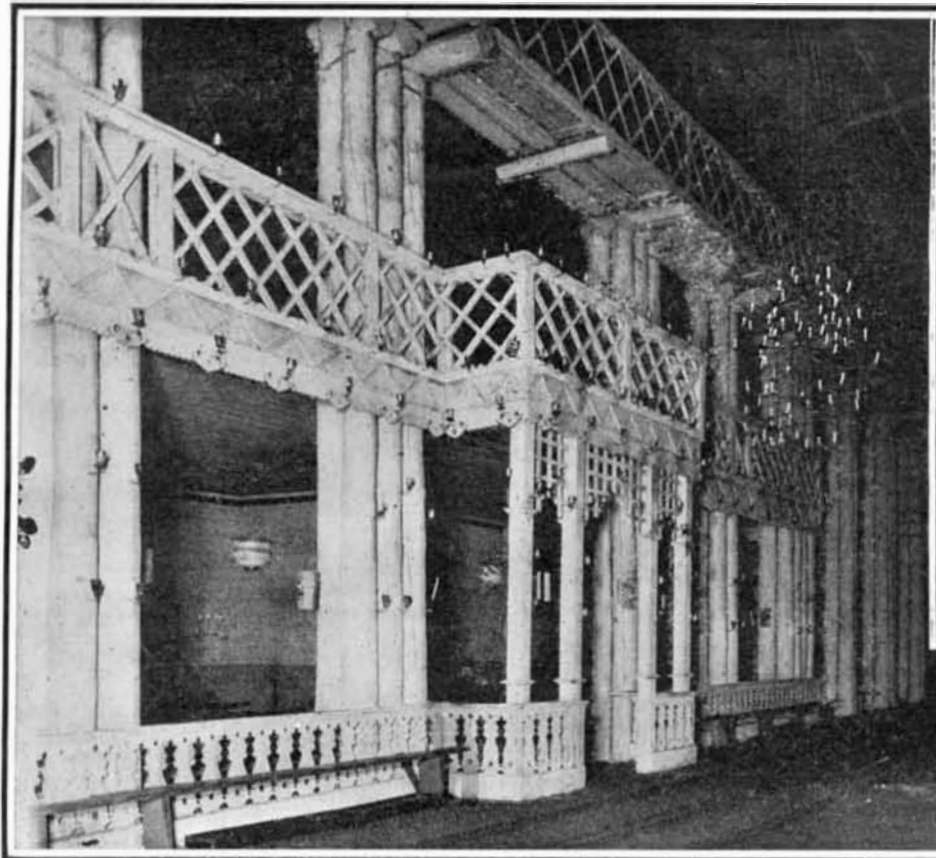
The Subterranean River in the City of Salt.

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violins make merry music as the couples whirl in wild Slavonic dance. Another vast chamber, about three hundred and fifty feet from the surface, is the Michalowice Hall on the second tier of the city. Rock-salt was dug out of this for forty-four years. It is about a hundred feet long, sixty-five feet wide, and one hundred and seventeen feet high. The sides and roof are secured by hundreds of tree-trunks, placed one above the other as pillars and strutted together. This reminds one of the terrible accidents that have happened in the City of Salt. More than once fires have broken out in the workings, and have burned for years, until the wooden props have given out. Or again, the strange, sullen-looking saline lakes, navigated by boats in these dark depths, may rise suddenly, probably fed by subterranean springs, and drown scores of these patient, hard-working men.

Worst of all, great masses of the rock-salt, often weighing hundreds of tons, may fall in avalanches from the domed roofs of the streets or the ceilings of new chambers. One notices that the immense saloons, restaurants, churches, and other public buildings hewn in salt, are lighted by great chandeliers of salt crystals. There is one in the Michalowice Chamber ten feet in diameter, twenty feet high, and containing about two hundred and forty candles.

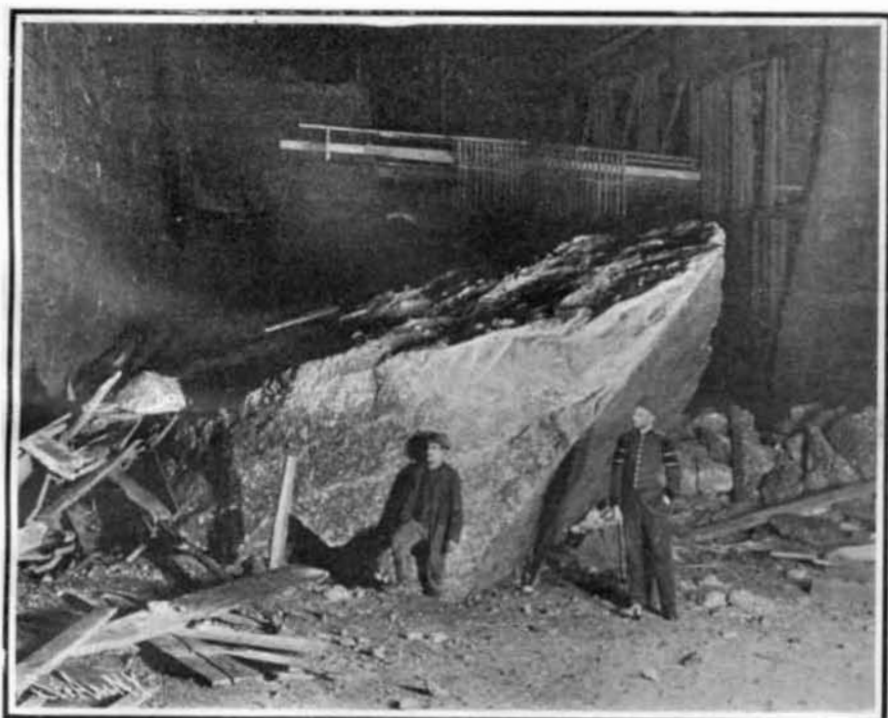
The Kaiser Franz Chamber, named after the present ruler of the dual monarchy, contains two immense pyramids with ornamental bases, commemorating a visit of the Emperor and Empress many years ago. This hall is nearly two hundred feet long and about one hundred and five feet high. Leaving this chamber,



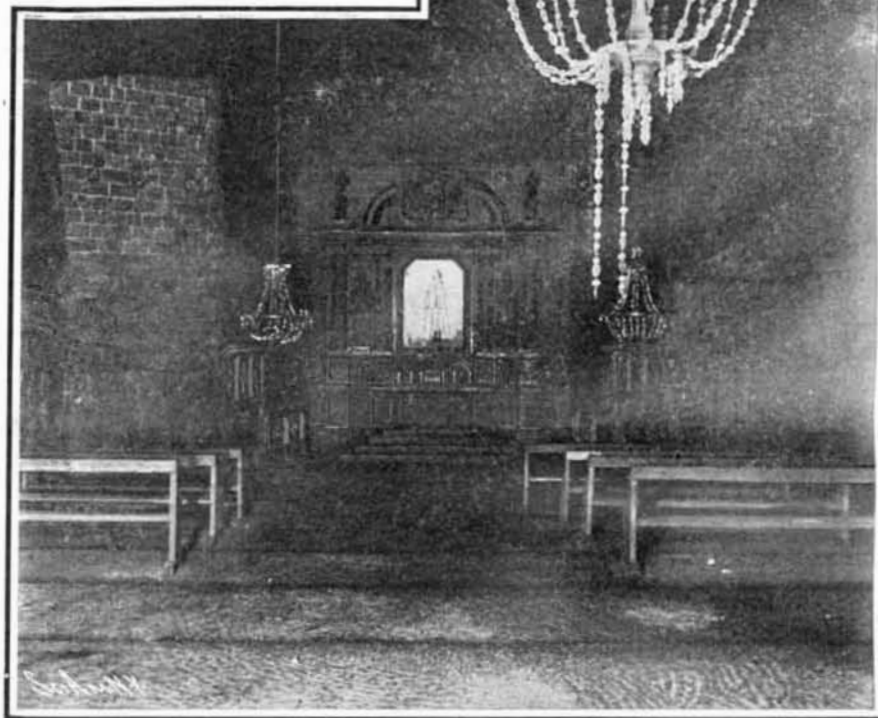
A Railroad Station and Its Restaurant in the City of Salt.



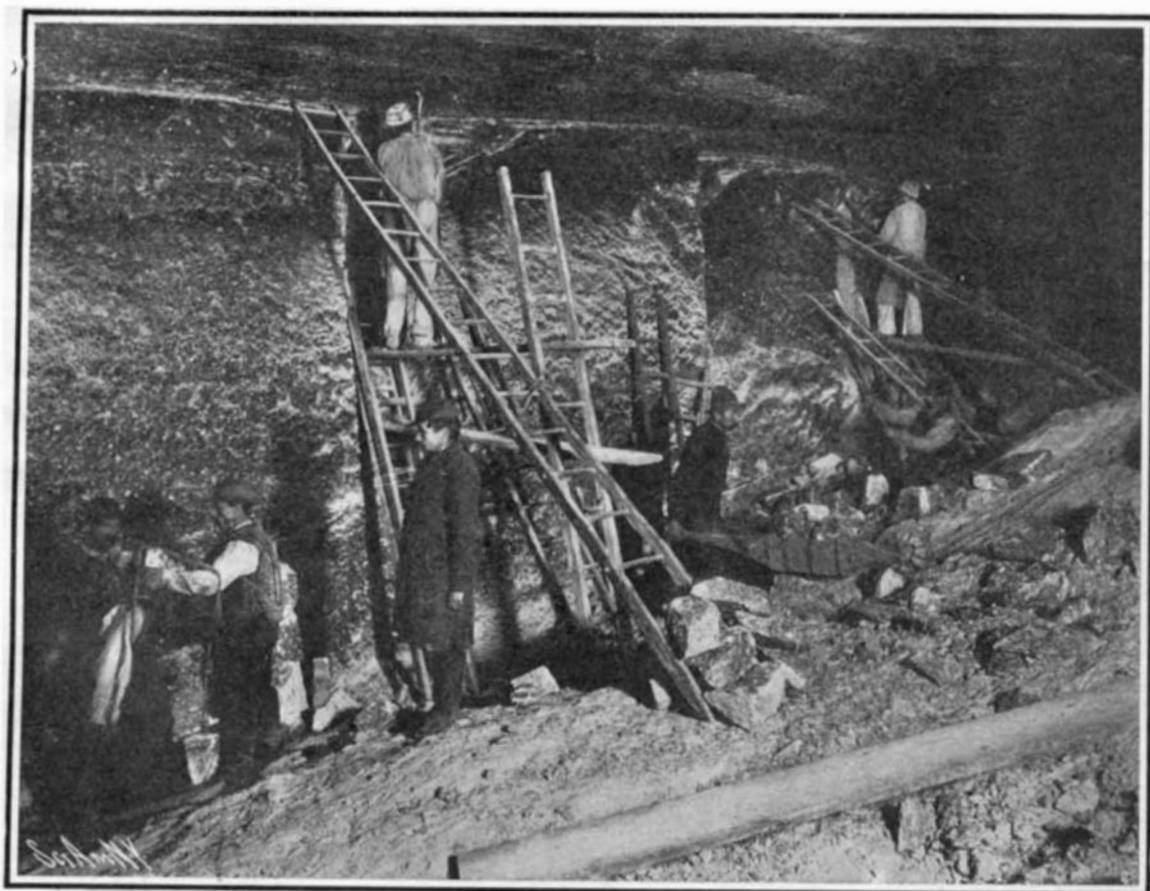
The Workmen Are Searched Daily.



This Great Mass Weighing Several Hundred Tons Fell from the Roof.
Salt Mining is not Without Its Dangers.

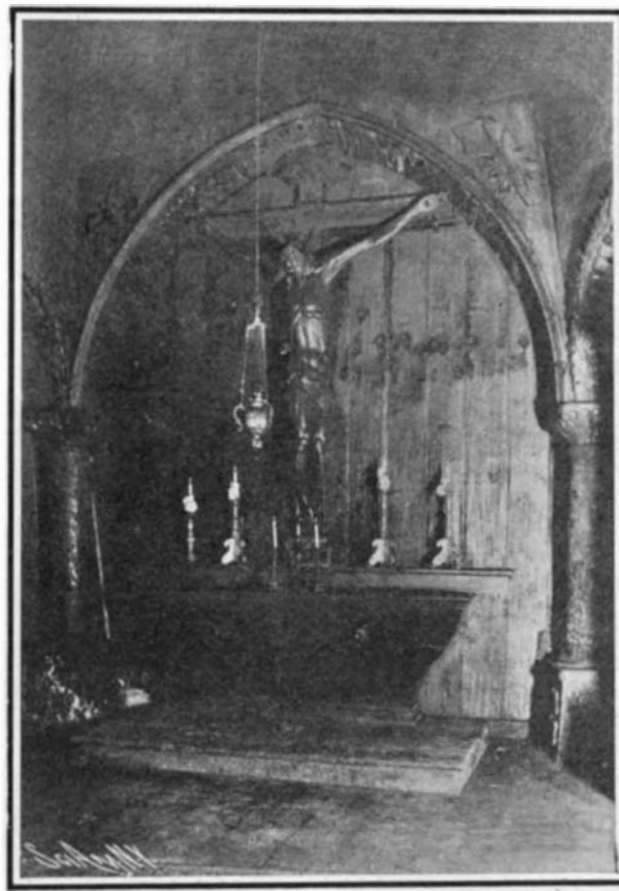


One of the Great Salt Chandeliers in the Salt Church Hewn Out of the
Solid Salt Rock.



Workers Deep Down in the Salt City Driving a New Street.

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A Side Chapel in a Church Hewn in Salt.