

Venice Dying, Unless the Engineer Saves It

Craft or Ignorance in the Building of the City
Now Exposed in Ruins



LIKE the passing away of a beautiful woman, Venice, queen of the Adriatic, pearl of the sea, most lovely of the cities, is thought to be dying.

One by one, the jewels that bedeck her crown are falling; the roses and lilies of architecture, which were given by those who loved her as their mother city, are fading and shriveling; the queen city is sinking to her end in a salt sea of tears.

Since the fall of the Campanile in 1902, other buildings have fallen; along the Grand Canal many palaces, rotting and crumbling, have been condemned; towers and lofty columns are bending; walls and priceless mosaics are cracking; floors are sinking. Today scaffoldings cling about the walls of St. Mark's Cathedral, the Church of St. John and St. Paul and the Frari are in the throes of constant repair, while the walls of the Palace of the Doges are being braced.

Frantically an army of engineers, architects and carpenters are busy bracing walls, strengthening foundations, filling in crevices, propping up floors. Was graft in the olden days responsible for the threatened collapse of the present? Did the builders of the city think more of filling their pockets than of erecting an enduring monument to their genius? Not a few of the engineers busy trying to save Venice say this is true.

O Venice! Venice! When thy marble walls
Are level with the waters there shall be
A city of nations o'er thy sunken halls—
A loud lament along the sweeping sea.
—Byron.

UPON 117 islands the city of Venice was built—not upon rocks rising rigidly and securely from the waves, but upon mud and clay—thick, leathery islands of mud, rising from an insecure base of sand.

With strong piles the builders reinforced the island bases, and upon them laid the foundations of their buildings—huts, palaces, churches. A city rose magically above the waves, and as magical as was its building was the budding of art, the unfolding of a flower which nowhere else in the world had ever bloomed in such magnificence.

On islands of mud, accumulated largely from debris floating down the rivers Po, Adige, the Brenta and the Piave, in the fifth century after Christ, native tribes, fleeing over the mountains of Italy before Attila, the terrible king of the Huns, builded houses and huts. In the terror of warfare and persecution Venice was born.

Then, as the centuries passed, the wonderful flower boomed. There rose the Campanile, the Palace of the Doges, St. Mark's, with its lacy traceries of stone and its shimmering domes; the Grand Canal became a moonlight dream as lovers glided, to the sound of mandolins and guitars, in gondolas on the waters; as men and maids passed up the marble steps of the churches to marriages, and mothers passed from baptismal rites with babies in their arms.

Across the 400 bridges passed hundreds of souls, and those that passed laughed blithely, full of the joy of life. One bridge they called the Bridge of Sighs, and over it many moved on to the great annihilation.

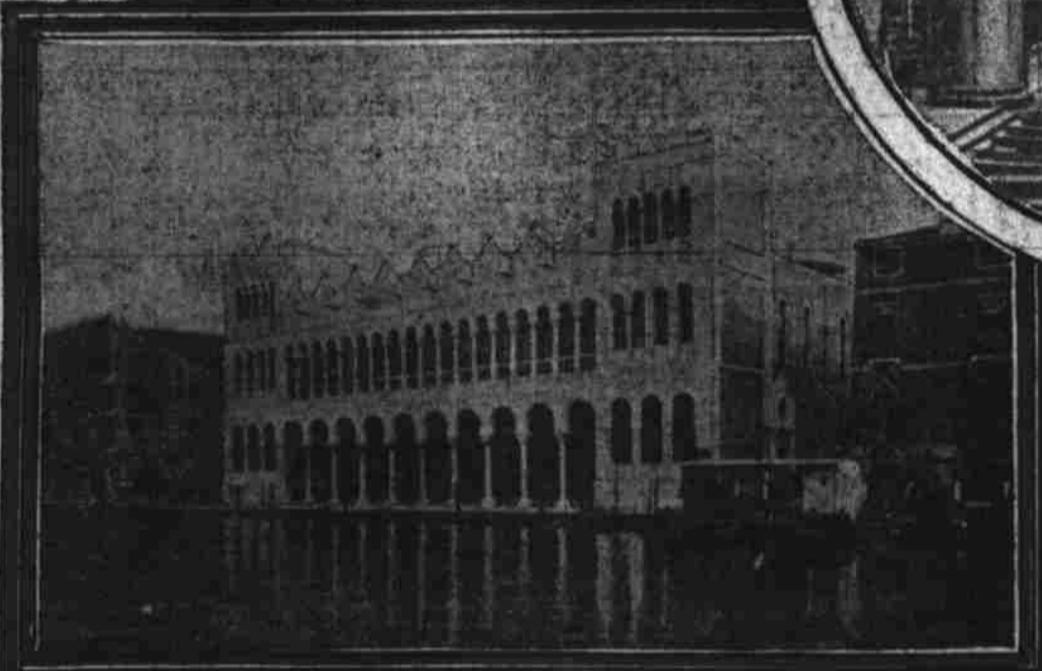
As the centuries passed art seemed to sur-

pass art; painters painted, sculptors hewed in stone and poets dreamed. Venice rose in power, and was haughty, before the nations. In the city were men, good and bad; some people rejoiced and others wept. Venice was happy, Venice was sinful, Venice was gay and mad. But she was beautiful.

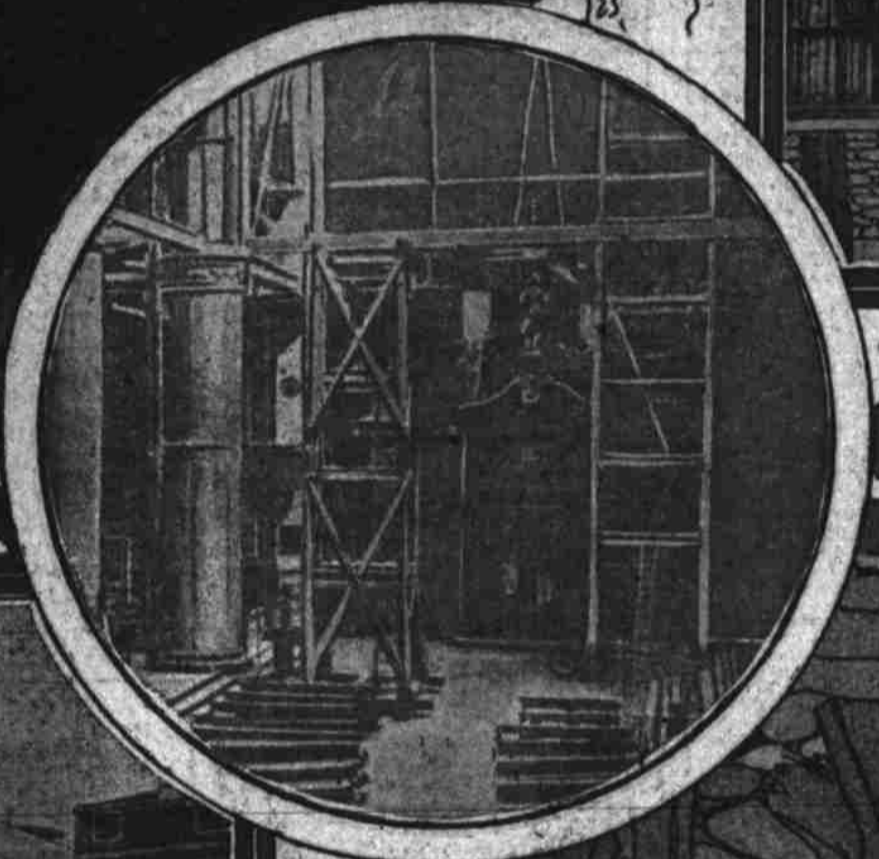
Like the waterfowl,
They built their nests among the ocean waves;
And where the sands were shifting, as the wind
Blow from the north or south—where that they came
Had to make sure the ground they stood upon;
Rose, like an exhalation from the deep,
A vast metropolis—

That is it—"an exhalation from the deep." Long after the doges died Venice grew in beauty; she remained the mistress of the waters, a woman city of imperishable charms.

But of comparatively recent years there came forewarnings of an approaching end. The heart of Venice—her foundations—began to decay. In 1902 came the first shock, the tocsin of alarm—the Campanile, the great tower which rose 300 feet in the air, with a tremor heaved back and forth, and, with a crash that rever-



On the Grand Canal.



Scaffolding like this is seen everywhere.



Support of St. Mark's Cathedral which may collapse.

berated through the city, fell into crumbling ruins.

The Campanile, sentinel of Venice, gave its warning.

For days the people wept over the fall of the great tower; stores were closed and houses draped in mourning. But it was not the fall of the tower alone which was deplored—as through a veil suddenly rent, the people of Venice saw, with startled eyes, the prophecy of doom.

In falling, the Campanile destroyed the Loggia, but providentially it fell free of the neighboring Cathedral of St. Mark and the Doge's Palace. Had it struck the Palace of the Doges, architects say nothing could have saved the famous structure. And if, on the other hand, the stone tower had struck the facade of St. Mark's—Italians hold their breath at the thought.

The fall of the Campanile aroused Venice to a sense of her danger. She began to look toward her safety. The municipal authorities ordered an investigation. Engineers, architects and geologists went to work.

And then they discovered a terrible thing. The mud islands on which the city was built had begun shifting. The sand beneath them was giving way. And the buildings were sinking—slowly and surely sinking.

Experts found that the Ducal Library was in danger, and at once orders were given for the removal of the 300,000 volumes. The library contained the Grimani Breviary, the most beautifully illuminated manuscript in existence.

As the experts continued their investigations more alarmingly apparent became the signs of

decay. A crack was found in the great arch of the Apocalypse in St. Mark's. The Bridge of Sighs was cracked, and liable at any minute to crumble into the canal beneath it. Then windows began falling from the Church of St. John and St. Paul—the great church built in 1384, where the doge every year in state attended service in honor of the victory of Venice over the Turks.

To save the city the experts agreed that many of the buildings would have to be demolished. Rotted and liable to fall at any time, it was certain that they would carry other buildings with them to ruin. So the destruction of the Abbatis was ordered, and reluctantly and sadly the Dario Palace was condemned.

Fortunately, the owner of the palace, the Countess de la Baume-Pluvine, is wealthy. She decided upon numbering each stone and article in the building. Piece by piece, it will be taken down, and in another part of the city, on a new foundation, piece by piece, the palace will be reconstructed. This will be at a cost of \$40,000.

In all parts of Venice the work of demolition and reconstruction is going on. There is sentiment in the hearts of these Venetians, and no sooner does a beloved landmark fall than they try to resurrect it elsewhere. They will stay with their city, and many declare that with it they will suffer the foretold doom.

With extreme care and difficulty plasterers have been trying to solidify the vaulted roof of St. Mark's without injuring the rare mosaics. Both the churches of St. John and St. Paul and the Frari must be watched constantly. In fear of sudden collapse, the statues—the winged victories and symbolic figures—have been removed from the Church of St. John and St. Paul.

In the Frari—the Pantheon of Venice, which contains the ashes of great admirals and generals of the republic—the statues have been dismantled. Board fences have been put up before the mausoleum of Canova, the chair and the sacerity. Even the pictures of "The Virgin," by Bellini, and the works of Tiepolo have been taken from the ceiling.

Professor Otto Wagner, of the Academy of Fine Arts, Vienna, declares that the piles upon which the buildings of the city were erected are rotting. And there is absolutely no hope, he declares, of saving the city. Professor Hippolyte Jambord, of the University of Paris, also has declared that the city is doomed.

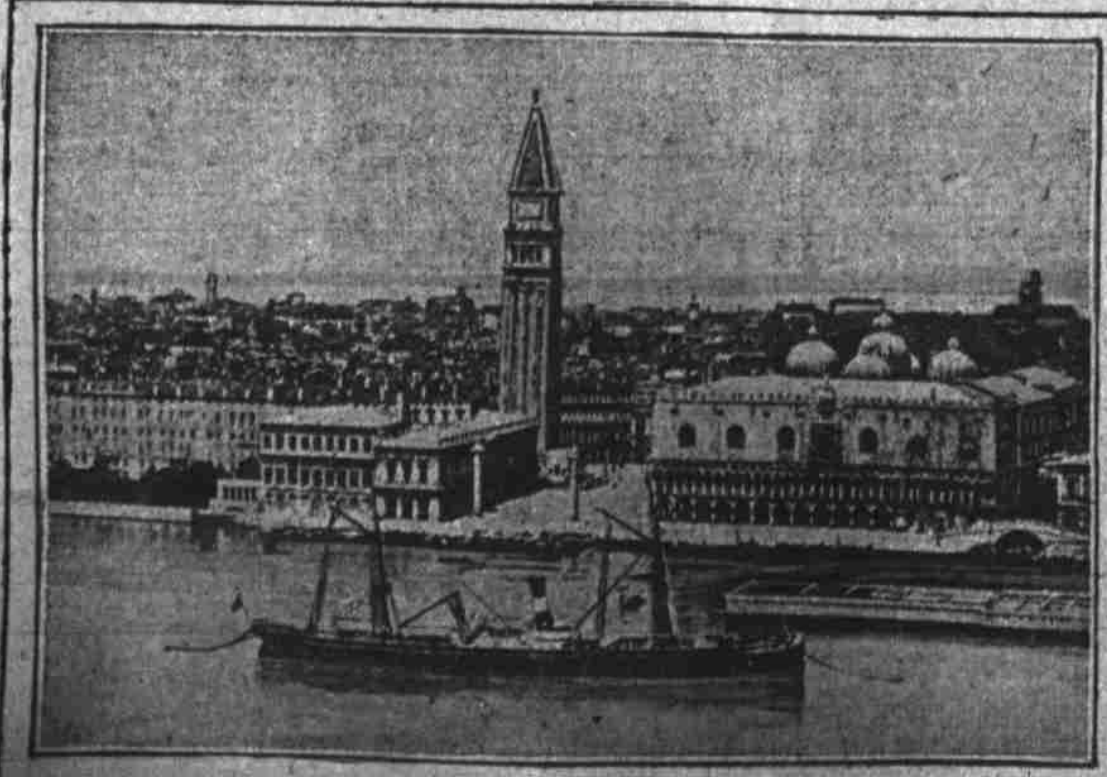
Shortly after the Campanile fell, C. H. Blackall, a well-known Boston architect, made an examination of the foundations of the city with Signor Giacomo Boni, the most eminent architect of Italy.

Mr. Blackall said that the city reposed on layers of alluvial clay, the first stratum of which ranges from a few inches to 100 feet in depth. This lies immediately over a bed of sand.

It is believed that dredging operations in the Grand Canal and the Giudecca several years ago caused a shifting of the sand. But still further back is thought by many to lie the real reason. There were grafters among builders in the old days as well as now, and to their avarice may be due the present plight of the city.

Perhaps Byron wrote prophetically:

Venice, lost and won,
Her thirteen hundred years of freedom done,
Sinks, like a seaweed, into whence she rose.



The Campanile before its fall.



Ruins of the Campanile.