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VENICE—WASMANN, ERICH



VENICE, city, Illinois, situated on the Mississippi River, 5 miles north of East St. Louis, and on the Gulf, Mobile and Ohio, Illinois Terminal, New York Central, and Wabash railroads. It is connected with St. Louis, Mo., by a toll bridge. With Granite City and Madison, Venice forms the Tri-Cities, a group of industrial suburbs of East St. Louis. Most of the residents are employed in steel mills. There was a ferry landing here as early as 1804, but the city was not incorporated until 1873. It is governed by a mayor and council. Pop. (1940) 5,454; (1950) 6,243.

VENICE, věn'is (Ital. **VENEZIA**, vâ-nâ'tsyä), city, Italy, capital of the province of the same name and of the region of Veneto. The city proper is situated on about 120 islands in a lagoon or shallow bay of the Adriatic Sea, 162 miles east of Milan; it is connected to the mainland by a 2½-mile railway bridge of 222 arches and by a modern vehicular causeway. The commune of Venice extends to the mainland and includes Porto di Marghera and Mestre. There is a large maritime station for handling Adriatic passenger ships, as well as an airport.

Setting and Plan of the City.—Sometimes called the Queen of the Adriatic, Venice has a physical site which few cities in the world can rival. Lying between the Alps on the northwest and the Adriatic on the southeast, the small mud islands of Venice are the creation of rivers and tides. In past geological ages rivers washed down from the Alps into the Lombard plains a thick debris of boulders and rich alluvial soil. A contrary action by the strong currents of the Adriatic shaped the silt of the rivers into long banks, called *lidi*, paralleling the coastline. Behind these reef islands large lagoons of brackish water were created, fresh water from the rivers and springs mingling with the salt of the Adriatic. One of the largest of these is the Lagoon of Venice, more than 180 square miles in area. Approximately in the center of this watery area are the muddy islands on which the first Venetians sank oak piles as foundations for their rude fisherman abodes. On these small islands has arisen the almost magical city of Venice—its churches, palaces, and public buildings resting on piles buried beneath the lagoon's waters.

Along the borders of the islands are more than 150 canals. The Grand Canal, shaped roughly like a reversed letter *S*, over 2 miles long and varying in width from 33 to 77 yards, is the main artery, cutting the city into two unequal parts and connecting the railway station at the

northwest with the open lagoon at the southeast. From this main waterway extends an intricate network of smaller canals, averaging 4 to 5 yards in width, and measuring some 28 miles in total length. These lesser waterways are spanned by almost 400 bridges, of which the most notable is the Ponte di Rialto, a singularly graceful stone arch of the 16th century, connecting the central and oldest section of the city with the large western quarter. On each of the tiny islands is a tortuous labyrinth of narrow, paved streets and lanes, some of which widen and join to form small, open squares. These narrow streets permit limited pedestrian travel, but most travel in Venice is by water, either in the *vaporetti* (little steamers) or *motoscafi* (motorboats) or by gondolas, which constitute one of the most distinctive features of Venetian life and which are so constructed as to permit passage through the narrowest canal. Barges propelled by men using long poles carry all the freight moving into and from the city proper.

The only large square in Venice is the Piazza di San Marco, one of the most beautiful squares in the world. Enclosed on three sides by the arcades of the Procuratie (once the residence of the highest officials of the state) and on the fourth by the magnificent façade of St. Mark's Basilica, it is the center of the city's activities. Here people come by day to trade in the many shops and to feed the flocks of pigeons which gather in the sunshine. At tables and on chairs set outside the numerous cafés, citizens and visitors enjoy refreshments while listening to the light-hearted music of local bands during afternoons and evenings throughout the year. To the south of St. Mark's is a smaller square, the Piazzetta, with the Palazzo Ducale on the east and the Old Library on the west. The Piazzetta extends to the Grand Canal, and from this spot can be seen some of the outlying islands and, across the open lagoon, the Lido di Malamocco, one of the world's most famed bathing resorts. At the northeast corner of the Piazza di San Marco is a clock tower erected in 1496, which serves as a portal to the Merceria, a narrow, winding street of shops leading to the Rialto and the Grand Canal.

Proceeding along the Grand Canal, one passes Venice's most beautiful and most representative buildings. North and west of the Rialto, for instance, are the Fondaco dei Turchi, a 13th century example of Veneto-Byzantine architecture; the 15th century Ca' d'Óro, a masterpiece of Venetian Gothic design; and the Palazzo Vendramin-Calergi, completed in 1509 and repre-

sentative of the Lombardesque style of the early Renaissance (named for the Lombardo or Lombardi family). South and east of the Rialto are other palaces, representing every phase in the creative genius of Venetian architecture. Beyond St. Mark's the canal broadens into the lagoon surrounding Venice. The sections of this part of the city are bordered by a wide promenade and public gardens.

Of the islands not forming part of the main mass of the city the chief ones are (1) Giudecca, by far the largest, on the south, separated from Venice proper by the Canale della Giudecca; (2) San Giorgio Maggiore, immediately east of the former and separated from Venice by the broad Canale di San Marco; (3) San Pietro, east of the main island group; (4) San Michele, with the cemetery, to the north; (5) Murano, a group farther north, with an ancient glass industry; (6) Burano, to the northeast, with lace factories; (7) Torcello, to the northeast; and, to the southeast, (8) San Servolo, with the province's insane asylum, and (9) San Lazzaro.

Historic Buildings and Other Points of Interest.—During the early period of Venetian art the city-state was closely associated with the Byzantine Empire. Thus techniques and forms of that culture were adapted by Venetian builders for use in palaces, public buildings, and churches. By the 13th century, after Gothic design had begun to make itself felt in the island city, the Venetian palace was fully evolved. Venice, later than other cities in Italy, adopted by the 15th century some of the features of the early Renaissance, thus developing the Lombardesque Renaissance style. Under the influence of the later Renaissance such buildings as the Procuratie Nuove were constructed.

Of many architecturally important structures in Venice the one most representative of the city's historic wealth and glory is St. Mark's Basilica, a magnificent example of Byzantine influence, begun in 829 to enshrine the body of St. Mark, patron of the city. It was rebuilt after a fire in 976 and converted into the Byzantine style during the 11th century. The fine marbles date from the 13th to the 15th century. Formed in the shape of a Greek cross, the church is adorned with five Oriental domes and a two-tiered façade of predominantly pink marble, crowned with ogee arches and Gothic tabernacles. Four gilded bronze horses, brought from Constantinople in 1204, stand in the terrace of the upper story of the façade. Both exterior and interior are decorated with a wealth of mosaics, the ceiling of the church being completely faced with mosaics on a gold ground. Other examples of the profuse riches within the church include the *Pala d'Oro*, an altarpiece of precious jewels, enamel, and old gold; and the Baptistery, adorned with 14th century mosaics and containing the tombs of two of Venice's most eminent doges. At the southwest corner of the cathedral stands the 322-foot-high Campanile (1912), an exact replica of the bell tower which, built at various times from the 10th to the 16th century, collapsed in 1902.

Other churches of special significance include, in the eastern quarter, Santa Maria dei Miracoli, a masterpiece of the Lombardesque Renaissance style, built in 1481-1489; the Gothic church of Santi Giovanni e Paolo, containing the burial vaults of the doges; and the 15th century church of San Zaccaria, with works by Tintoretto

(Jacopo Robusti, 1518-1594) and Titian (Tiziano Vecelli or Vecellio, 1477-1576). In the northern quarter are Santi Apostoli and San Giobbe, a Renaissance structure with a Gothic bell tower, containing works by Tuscan artists of the 15th century. In the western quarter is Santa Maria Gloriosa dei Frari, church of the Franciscans, begun in 1250 and rebuilt in Gothic style in the 14th century; it contains some of the finest examples of Venetian painting. Here too is the Church of San Rocco, with its Scuola containing 40 Tintoretto paintings; also San Giacomo dall'Orto, a structure of the 12th and 13th centuries. The southwestern quarter contains the 14th century church of Santo Stefano (rebuilt in the 15th century), and the octagonal church of Santa Maria della Salute, begun in 1631 by the architect Baldassare Longhena (1604-1682). On the island of San Giorgio Maggiore stands the church of the same name, built by Andrea Palladio (1508-1580), and in the suburb of Giudecca is the church of Il Redentore, constructed from Palladio's plans and consecrated in 1592.

Second only to the churches in magnificence are the many palaces. Made for the most part of pink and white marble, with gracefully arched and decorated windows, balconies, loggias, and colonnades, they rise like dream castles from the lapping waters of the canals. The Palazzo Ducale, former residence of the doges and chief magistrates of the republic, is the most important of these unique structures. The principal section of the building, that facing the lagoon, was built between 1309 and 1340, the wing extending into the Piazzetta between 1424 and 1438, and the east wing between 1483 and 1549. The famous Bridge of Sighs, constructed from about 1595, connects the palace with the prisons. Within the courtyard is the impressive Giants' Staircase. The palace contains some of the best examples of Renaissance painting, including works by Tintoretto and fine specimens of Paolo Veronese (Paolo Cagliari or Caliari, 1528-1588). West of the Ducal Palace is the Old Library of St. Mark, founded in 1468 and rebuilt between 1536 and 1584 by Jacopo Sansovino (Jacopo Tatti, 1486-1570). Adjoining it are the Zecca (or mint), containing the Biblioteca Nazionale Marciana, with 500,000 books and over 13,000 manuscripts, and an archaeological museum.

Of special interest are the Procuratie Vecchie, former residences of the nine procurators of the Venetian Republic, built by Bartolomeo Buon (1450?-1529), and the Procuratie Nuove, begun in 1584 by Vincenzo Scamozzi (1552-1616). The Accademia di Belle Arti (Venice Academy) is notable for the number of paintings by Titian, Veronese, the brothers Gentile (1429?-1507) and Giovanni (c.1431-1516) Bellini, Jacopo Palma, called Palma Vecchio or Il Vecchio (1480?-1528), Tintoretto, and Giovanni Battista Tiepolo (1696-1770). Other museums include the Correr, the Marciano (connected with St. Mark's), and the Galleria d'Arte Moderna and Museo d'Arte Orientale, both housed in the Palazzo Pesaro. Since 1895 an international exhibition of modern art has been held biennially in the pavilions of the Public Gardens.

Painting.—The critic Bernhard Berenson, in *The Venetian Painters of the Renaissance* (see *Bibliography*), has said that Venetian painting "is the most complete expression in art of the Italian Renaissance." With "exquisite tact in their use of colour," the Venetians were able to

express in painting the special values of the Renaissance—"delight in life with the consequent love of health, beauty, and joy. . . ." The great artists—the brothers Gentile and Giovanni Bellini; Giovanni Battista Cima (called Cima da Conegliano, c.1459–1517 or 1518, and Vittore Carpaccio (b. before 1456, d. before 1526), who began to paint at the end of the 15th century, succeeded in solving the major art problem of the time by, as Berenson says, "giving the space . . . real depth, . . . giving solid objects the full effect of the round, . . . keeping the different parts of a figure within the same plane, and . . . compelling things to hold their proper places one behind the other." They painted "magnificent processions," which satisfied "the Venetian's love of his State, and . . . his love of splendour, beauty, and gaiety." Il Giorgione (Giorgione da Castelfranco, c.1478–1510) quieted down the "over-boisterous passions" of the earlier painters and developed portrait painting to a high degree. Titian perfected the portrait, gaining the effect of greater reality by "the almost total suppression of outlines, by the harmonising of his colours, and by the largeness and vigour of his brush-work."

At the end of the period of ascendancy stands Tintoretto, expressing overwhelming power and gigantic force with immense energy and mastering light and shadow in such a way as to infuse the human spirit of individualism into even the most colossal of canvases. Other important Venetian painters of the late Renaissance include Veronese, with his paintings expressive of "frank and joyous worldliness," and Jacopo or Giacomo da Bassano (originally Ponte, 1510–1592) and his sons Francesco (1549–1592) and Leandro (1557–1623), who so charmingly depicted the simple country life. Just before its final decline, painting in Venice exerted its force once more in Tiepolo.

Commerce and Industry.—Though Venice is no longer the important merchant city that it was in the 15th and 16th centuries, and though much of its present economic structure depends on the tourist trade, there are enough small manufacturing plants and establishments connected with all phases of shipping to rank Venice as one of Italy's foremost commercial cities. The glass and lace industries continue to flourish, as do the small factories making silk stuffs, furniture, gold and silver wares, tobacco, and woolens. Both passenger ships and large freighters have easy access to the city, and at Porto di Marghera, immediately west of the main island group, are ample facilities for industry. Here and at Mestre are metal and machinery factories, as well as food-processing establishments and soap and wax plants.

History.—Historians are in general agreement that before 452 A.D., when Attila invaded northern Italy, the islands of the Venetian lagoon had a small native population of simple, poor fishermen. Refugees from the mainland occasionally fled from the barbarian invasions to the safety of the islands, but, when the danger had passed, most of them returned to their mainland homes. Some of these newcomers remained, however, and by 568, when the Lombards were beginning their conquest of northern and central Italy, a considerable population had gathered on the islands. Eventually 12 townships, centered around the present Rialto, were formed and in 584 they constituted a separate community. Claimed by

the rulers of Byzantium to the east and by the Lombards and Franks to the west, Venice struggled for, and achieved, independence from both. The townships, each governed by a tribune, consolidated to handle affairs affecting the whole lagoon; by 697 these tribunes elected a supreme magistrate, called the doge, who settled disputes among the member townships. Thus the germ of the state of Venice was formed, and in 810 the seat of the government was established in the Rialto. The Concione, an assembly of the entire Venetian population, elected the doge. Any attempt by him to exert individual tyranny or to create a hereditary position meant death or expulsion. Eventually the doge was given the assistance of two counselors, chosen by the assembly.

But the growth of trade and commerce produced an oligarchy of wealthy commercial families, which gradually gained ascendancy in state affairs. From their ranks was formed the Great Council, whence in turn was selected the Council of the Invited, composed of prominent citizens, to assist and direct the doge's work. In 1172, just as the Crusades were beginning to enrich Venice, a new constitution established an assembly of 480 representatives from each district and additional counselors for the doge. Finally, in 1297, the oligarchy succeeded in making election to the Great Council open only to those who had been members during the preceding four years and, in future, to those whose paternal ancestors had sat in the original council. Names of those eligible were inscribed in the Golden Book, and thus the Venetian aristocracy was established as sole power in the state. The only serious revolution, inspired by Baiamonte Tiepolo in 1310, failed, and, in order to prevent further uprisings, a Council of Ten was created. This council, chosen by the Great Council, was entrusted with the protection of public safety and with vigilance against conspirators. Its status was made permanent in 1335. Although in the hierarchy of rule the doge stood at the top of the pyramid, his position had more splendor to it than power. In characteristic Venetian fashion he was surrounded with much pomp and ceremony. A few individual doges, by virtue of their high intelligence and strong personalities, were able to influence the course of events, but it was the Council of Ten and the Great Council which exerted power in the city-state. They dictated all policies and details of the state's affairs, down to prescribing the size of the crews on Venetian vessels, all of which were state built and state owned. With this indigenous as well as stable and efficient government, Venice continued until its occupation by foreign powers and eventual union with the Kingdom of Italy. Before that time, however, the city-state grew to tremendous proportions. This growth took place in four distinct periods.

The first began soon after the city was established in the 9th century, when the subjugation of pirates along the Dalmatian coast enabled Venice to control the Adriatic. In 1096, when the Crusades to the Holy Land began, Venice was chosen as one of the chief ports of embarkation. This marked her second period of growth, since under the stimulus of the Crusades, Venice was able to expand her commercial facilities and to extend her dominion over the sea-ports of Syria. With the fall of Constantinople and the establishment there of the Latin Empire

in 1204, Venice entered her third and grandest period, gaining as part of her share of the victors' spoils the coast districts of the Adriatic and the Levant as well as the islands of the Cyclades and the Sporades and seaports in Thessaly and on the island of Crete. Thus Venice had an unbroken line of communication with Constantinople and the Levant. She ruled her colonies with skill, interfering little in local institutions and encouraging trade. Venice entered her fourth period of expansion in 1381, defeating Genoa, her only serious naval competitor, and gaining supremacy of the Mediterranean. Meanwhile she began to acquire areas on the Italian mainland. By 1405 her possessions were consolidated and included Padova (Padua), Vicenza, and Verona. This wide territory, stretching as far north as the Alps, she held until the League of Cambrai, formed in 1508 by Pope Julius II, Emperor Maximilian I, and the kings of France and Aragon, stripped the republic of much of her Italian possessions. (Some of this territory was regained, but henceforth Venice's power in Italy was limited.) From the 15th to the 18th century, Venice engaged in a series of long and costly wars with the Turks, who took over her chief insular possessions of Cyprus (1571) and Crete (1669), and the Morea (Peloponnesus, 1715), as well as control of the eastern Mediterranean.

Discovery of the Atlantic sea route to the Far East by the Portuguese and Portugal's sudden rise to the rank of a leading sea power in the early 16th century hastened Venice's decline. Nevertheless, until the dissolution of the republic by Napoleon in 1797, Venice continued her fruitless efforts to recover her commercial ascendancy. By the Treaty of Campoformio (1797), Venice was attached to the Austrian Empire; then, in 1805, she became a part of the Kingdom of Italy sponsored by Napoleon. In 1815, Venice was incorporated in the Lombardo-Venetian Kingdom under Austrian rule. In 1848 an abortive revolution attempted to re-establish the old republic, but in the following year the city again was occupied by Austrian forces. This status continued until 1866, when the city and Venetia passed from Austria to France and then, after a plebiscite, were united to the newly founded Kingdom of Italy.

Venice was subjected to aerial attack during World War I, and damage to buildings and art works occurred. Though it was occupied for some time by German forces during World War II, and though the ports and their approaches were mined, Venice escaped serious damage. The city was captured by Allied troops on April 30, 1945. After the war, government by a popularly elected mayor and council, abolished during the Fascist period, was restored.

In 1949 the population of the commune of Venice was 316,253.

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ELINOR L. PRICE.

VENICE, Bank of, originated in the 12th century, but it was not until 1619 that it was reorganized as a public bank, the Banco del Giro. Its history forms one of the most remarkable chapters in the annals of money and banking.

In 1171, the Venetian Republic, needing money to wage a war with the Byzantine Empire, levied a forced loan on the coins and bullion which the goldsmiths and moneylenders had deposited in the mint and treasury. Unlike Genoa, the republic repaid its creditors, not by pledging its revenues, but by using its authority to create an artificial bank money more valuable than coins and bullion. This money consisted of the registration in a book of so many artificial or imaginary ducats, representing neither coins nor currency notes (legally the only medium capable of liquidating bills of exchange). The state opened the Camera degl' Imprestiti, or Chamber of Loans, giving credit on its books to each of the persons from whom it had borrowed for the amount of their loss, with interest at 4 per cent annually. Since the interest was always paid punctually, the effect was to create a permanent and reliable fund on which the creditors or assigns could demand and receive the interest forever. Since assignment was payable only in credits on the books of the chamber or bank—which came to be known familiarly as the Giro—a permanent income was established for the chamber, of which it could not be deprived as long as the state survived. The interest was later abolished as other sources of income became so large as to make the payment of this interest superfluous.

Elsewhere in Europe in the Middle Ages the debasement of the coinage became common, and there was no assurance of honest payment for a bill of exchange. In Venice, however, the Giro, by instituting an imaginary money which could not be debased and by establishing a fixed legal relation between its coined money (the first gold florins were struck in Venice in 1252) and its imaginary money, gradually became a reliable center of exchange for both domestic and foreign commercial transactions. This development received great impetus from the expansion of Venetian maritime power and commerce and from the reputation for impartiality earned by Venetian jurisprudence. In 1423, the Giro required that all bills of exchange drawn upon Venice should be paid only at the bank. In presenting a bill of exchange, the holder was required to effect the transaction in person or by proxy. The transfer was made in the presence of two bookkeepers. No coins were involved in the transaction, and the bill could not be circulated as money. Payable only at the Giro and in Giro credits, it was valueless elsewhere, valueless in other hands than those of the drawee.

The Venetian government prohibited the circulation of foreign coins or paper in its territories. All foreign coins were required to be sold to the mint, where they were valued, paid for according to their metallic content, and re-coined into Venetian pieces. All contracts made payable in coins (none of which concerned the Giro) had to be liquidated at the legal rate. Penalties for infraction of these regulations extended to complete confiscation. The Giro seldom received or paid out coins or paper money. It dealt only in its own imaginary money by inscribing debits or credits in its books. Any coin transactions referred to it were turned over to a separate depository.

For its transfers of accounts it made no charge.

Those who desired a safe place in which to deposit coined money and draw upon it by transfer of account (as in the Giro) were served by a branch department or depository strongly built and well guarded which was established for these purposes by the Giro, but without any further connection between the two institutions. The artificial money of the Giro was never mingled or confused with the actual money (coins) of the depository.

Some authorities have imagined that the "Unit" of the money of account (the artificial or imaginary money of the Giro) was the ducat. This is somewhat misleading. Actual ducats seldom or never went into or out of the Giro. The ducat was the integer, not the "unit" of its money. Its unit of money was the whole amount of credits (or debits) on its books, multiplied by their rapidity of circulation from one account to another. This rapidity or velocity is conjectured to have been about twice a day, at least during its halcyon period.

The depository (*caisse de comptant*) was under the influence of finance, commerce and speculation: the Giro was independent of them all. The fund of the depository "would be exceedingly fluctuating, because it would correspond with the changes of trade in each year and from year to year. It kept pace with the exigencies of commerce; was perfectly elastic and impressionable to the movements of trade." This depository failed three times, in 1453, 1600 and 1717. The Giro being independent both of commerce, finance and trade, paid no heed to their exigencies. Its fund was neither elastic nor impressionable. Hence it never failed, indeed it could not fail, because it owed no debts.

While there was no physical relation between the imaginative money of the Giro and the ponderable and portable money (coins) of the state of Venice, the government, for the convenience of merchants and others keeping accounts both with the Giro and the depository, created by decree an arbitrary relation between them of 20 per cent, so that it took a hundred ducats in Venetian gold coin to equal in value 80 ducats of account in the Giro. The difference was called *agio*. This agio was afterward raised to 30 per cent and even more, by means of a *sur agio*, or super-agio; the imaginative money being always more valuable than the real.

The so-called "capital" of the Giro in the 13th century has been estimated at about 2,000,000 ducats; in the 16th century (discovery of America and sea-route to India) about 4,000,000; in 1750, 5,000,000; in 1797, 14,000,000. When in that year Napoleon captured the Giro the spoil consisted merely of pen, ink and paper: a set of accounts. Not being able to convert these assets, he left them undisturbed and unaltered.

Credits in the Giro being guaranteed by the state and transferable on its books rendered them very desirable, either as investments or as a ready and reliable means of liquidating commercial transactions. These, together with their inviolability and other advantages, explain their superior value compared with coins.

Throughout its earlier history all moneys deposited with the Giro were treated as loans to the state, credited to the depositor as Giro

money at par and handed over to the treasury. But when the commercial demand for bank money raised it to a premium over coins, the depository was established and the earlier practice ceased. The imaginary money of the Giro had become too valuable to be sold for gold or silver coins at par.

The Council of Venice decreed that bank money should not be liable to seizure for debt, nor the subject of mortgage: a decree that assisted to still further raise its value over that of coins.

The three great decrees affecting the Giro: the provision that bills of exchange, unless otherwise stipulated and so expressed, should be payable only at the Giro; that all payments in gross or in wholesale transactions should be effected through the Giro, and the stoppage of interest payments on the capital of the Giro are all ascribed to the year 1423, when Thomas Moncenigo was Doge. There are, however, reasons to believe that these decrees were not coincidental. A later decree of the Council prohibited and severely punished all persons convicted of paying or receiving coins at any other than their denominational value; a provision that still further enhanced the superiority of bank money.

The bank (Giro) was shut one day in each week and four times in a year, each time 20 days, to balance and supervise the books. These intervals constituted a practical moratorium of 132 days in the year. During the intervals when the bank was thus shut, no bill payable in it matured, none could be protested until six days after the opening. This extended the moratorium to 138 days per annum, during the whole of which time the bank was drawing interest on such of its funds as were disposable in market; while it was paying out none. For the history of other ancient banks see BARCELONA, BANK OF; BYZANTIUM, BANK OF; FUGGERS, BANK OF THE; GENOA, BANK OF; MEDICI, BANKS OF THE; TYRE, BANK OF.

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VENICE PRESERVED, or A PLOT DISCOVERED. 'Venice Preserved' is hailed by some critics as "the greatest tragic drama between Shakespeare and Shelley." This judgment may be accepted if we are careful to exclude plays written during the lifetime of Shakespeare. In its very excellences, and these are of first magnitude, this play reveals how far tragedy had traveled since the Elizabethan era. In all respects of workmanship, constructive power and eloquence, the play is faultless. It lacks only that finer grasp of truth by which the prime masterpiece is distinguished from its offspring of the second generation. The

play falls short by the measure of the qualities that made it one of the most successful plays of a century, by the fact that it is essentially a situation play, and by its sheer theatrical effectiveness.

More than any other work of this time *Venice Preserved* draws its inspiration from Elizabethan tragedy. Here again are the revenge motives of the tragedy of blood. But these have now turned to conspiracy and intrigue. The conspiracy that in *Julius Caesar* occupies a scene or two becomes the theme of a play. The play secured and maintained its popularity largely through the three effective parts which offered scope to the genius of successive generations of actors. Pierre and Jaffier are closely studied figures of conspirators bound by oath of loyalty. Pierre is simple, trustful, direct. Jaffier is irresolute, a lover-warrior. Belvidera is one of the favorite women characters of the 18th century stage. She is the loving wife "shining through tears, like April suns in showers" for love of whom the fatal difficulty first grows and who Cleopatra-like hangs upon her soldier's arms and will not let him go. The two men come from Otway's source book, but Belvidera is his own creation. The play is marred by some vulgar comedy of a type dear to Restoration audiences.

The author, Thomas Otway, crowded his 33 years full of tragedy, the written ones hardly more painful than the tragedy of his own life. The story is taken from an historical novel *Conjuración des Espagnols contre la Venise en 1618*, which existed in an English translation of 1675. It was presented in February 1682, the part of Belvidera being taken by Mrs. Barry, to whom Otway had given his hopeless devotion. As an acting play it was popular down to the freeing of the theaters, the part of Belvidera being assumed by Mrs. Siddons and Miss O'Neill, and the parts of Pierre or Jaffier by Betterton, Quin, Garrick, Kemble, Macready and Phelps. Editions: Noel, R., ed. *Mermaid Series* (1888); McClumpha, C. F., ed. *Belles Lettres Series* (1908). Consult Gosse, E., *Seventeenth Century Studies*; Matthews, J. B., *Chief British Dramatists* (1924).

THOMAS H. DICKINSON.

VENIZELOS, Eleutherios, Greek statesman: b. Crete, Aug. 23, 1864; d. in exile, Paris, March 18, 1936. He was educated at his home town, at Smyrna, and the University of Athens, practised law in Crete and was elected deputy for the district of Kedonia in the Cretan assembly in 1888. He first acquired fame in the troubled events that led to the liberation of Crete in the insurrection of 1896-1897. He became the leader of his people and president of the new Cretan national assembly. But the advent of Prince George of Greece as high commissioner of Crete was followed by a serious conflict between him and Venizelos. The prince aimed at despotic government, but Venizelos had not overthrown the tyranny of the Turk in order to set up a new despotism from Greece. He resigned his office, donned military uniform and headed the insurrection of 1905 which culminated in the fall of the prince and his retirement to Paris. Under the new commissioner, Zaimis, Venizelos returned to power with increased prestige. His fame spread to Athens and fired new hopes in Greece. In the political confusion of 1909, when the throne

trembled and the nation itself seemed on the verge of dissolution, the democracy of Greece appealed to the man who had saved Crete to come and be its savior also. The late King George, overlooking the outrage Venizelos had committed on his son the prince in Crete, joined in the appeal. Although a confirmed Republican, Venizelos came to Greece, saved the dynasty and the country, carried through a revision of the Constitution and prepared the Balkan League (q.v.) of 1912. A man of unswerving honesty, he used smooth words neither to his king nor the people; he boldly declared that the crown had usurped too large a place in the function of government. He reformed the army and navy, swept away the oppressive taxation on the poor, set the throne on its feet and gave the country a stable administration. All this he accomplished in two years. After the overthrow of the Turk in the first Balkan War Venizelos strove hard to avert the disaster of the Bulgarian defection from the League. When Bulgaria was crushed and defeated, Venizelos offered magnanimous concessions to soothe Bulgarian sentiments, but King Constantine, who had succeeded his father, intrigued against the minister. From the beginning of World War I Venizelos was convinced that Greece must join the Allies, especially after the entry of Bulgaria, for Greece was bound by treaty to come to the assistance of Serbia. Thwarted by his king and queen, the latter a sister of the kaiser, and the intrigues of German agents, Venizelos steadily prepared for intervention. Unable to carry his point, he finally broke with the king and set up a provisional revolutionary government at Salonica. After the abdication of Constantine, and the accession of King Alexander in 1917 Venizelos returned as prime minister. For the two years following the armistice he spent most of the time in France as the representative of his nation in the Peace Conference. He was defeated in Nov. 1920, and left the country. However, he was appointed to represent Greece at the Lausanne Conference (1922-1923) and returned to Greece as premier for the brief period, Jan. 11 to Feb. 3, 1924, when he resigned because of ill health. In 1928 he was again chosen premier of Greece. In March 1935 he engineered an uprising of large proportions which was put down and again drove Venizelos into exile. He wrote *Grecia ante la Guerre* (1917); *Cinq Ans d'Histoire Grecque—1912-1917* (1917). Consult: Box, P. H., *Three Master Builders* (London 1925); and Gibbons, H. A., *Venizelos* (1923).

VENOMOUS ANIMALS. Among the adaptations for defense and offense found in a very few species of animals are poison-secreting organs. In the *Coelenterata*, which include the sting ray, jelly fish, and others, peculiar stinging cells, termed *nematocysts*, eject a numbing fluid on being touched by another animal. In centipedes, one pair of jaws has a hooked fang connected with a gland which secretes a virulent poison. Among insects, such as the bees, hornets, etc. (q.v.), the sting (see OVIPOSITOR) consists of sharp filaments, perforated for the transmission into the wound they make of a poisonous or irritating fluid, secreted by a special gland. In the scorpions (q.v.) the poison gland is situated in the last segment of the jointed tail, the

fang being formed by the modified *telson*. Among higher animals the serpents (q.v.) constitute the chief group in which a venomous apparatus is present. In these animals certain modified teeth of the upper jaw form grooved fangs, which communicate with the poison-glands, formed by modifications of the salivary glands. (See RATTLESNAKES). The venom of serpents appears to act by altering the constitution of the blood and by action on the blood corpuscles preventing the due purification of the blood. It may be remarked that in all cases the venomous matter must be introduced *directly* into the circulation to produce its effects. A person may swallow the poison of a snake without experiencing any evil effects.

VENTADOUR, vān'ta'dōōr, Bernard de, one of the most famous of the early French (Provençal) writers: b. at Ventadour in Limousin, toward the beginning of the 12th century. He early developed a talent for the poetry of the troubadours and as a traveling troubadour he is known to have visited most if not all of the Provençal countries, at the courts where his talent as a singer made him welcome. It was, however, at the court of Eleanor of Aquitaine that he was the greatest; and it is believed that when the latter princess married Henry II of England the poet went with her to the English court. Ventadour had a strong and lasting influence upon Provençal literature (q.v.). Consult Raynouard and Mahn for collections of his songs, and the complete edition with music by K. Appel (Halle 1915).

VENTILATION. See HEATING; AIR CONDITIONING.

VENTILATION, Physiological Aspects of. The type and quantity of ventilation for the buildings in which people live and work are determined by the magnitude of the following factors: (1) human metabolic products, that is, heat and body odors; (2) exterior heat sources; and (3) miscellaneous substances that may become airborne such as dust, fumes, vapors, gases, which occur especially in manufacturing operations. The objective of ventilation is to provide either healthful or comfortable atmospheric conditions. The healthful aspects of (1) and (2) in ordinary circumstances are of no consequence unless there is a connection between comfort and health.

Respiration.—Man's oxygen requirements are relatively so small that in practice this factor is quite unrelated to ventilation. If body heat were satisfactorily dissipated, a man standing in a cubicle would notice no lack of air for respiration with a ventilation rate as little as one cubic foot of air per minute or less.

Body Odors.—The carbon dioxide exhaled by man is neither toxic nor unhealthful, nor are the malodorous vapors from decaying food matter or sweat secretions. The odors are, however, universally disagreeable to civilized people and their elimination is the primary criterion determining the ventilation requirements for auditoriums and indoor places where people congregate in sufficient numbers to require mechanical ventilation. Man's olfactory nerves become fatigued and his sense of smell is impaired on short exposure to odors; therefore, freedom from odor on first entering a room is a measure of its ac-

ceptability, and of adequate ventilation. Rates of ventilation ranging from 10 to 40 cubic feet per minute for each person in the space are required for adequate dilution of body odors.

Body Heat.—The most common function of ventilation is to facilitate the dissipation of body heat at thermal levels that are not uncomfortable. The human body has marvelous powers of adaptation, to rid itself of its constant flow of metabolic heat in various conditions of temperature and humidity, and also to become acclimatized, over a period of weeks, to heat conditions that it could not formerly tolerate. However, between those conditions of temperature, humidity, and air velocity that are comfortable, and those extreme conditions which may cause heat exhaustion and collapse, there is a broad zone of discomfort.

Body heat is transferred partly by direct conduction (convection loss) to surrounding air when it is at a lower temperature than that of the body and partly by evaporation of sweat from the skin regardless of air temperature. Sweat evaporation may occur in dry atmospheres with no visible film on the skin. If atmospheric conditions prevented evaporation of sweat as would be true if the relative humidity were near 100 per cent, a man standing in a small space ventilated at a rate of 30 cubic feet per minute would raise the temperature of the air stream from 10 to 15 degrees. If, in other circumstances, the humidity were moderate and the air temperature at 98° to 99°F., that is, at body temperature, dissipation of the same body heat would require the evaporation of one ounce of sweat every six or seven minutes. This is derived by identical calculations that apply to the evaporation of water in a steam boiler. Increased air velocities have a marked effect in promoting loss of body heat both by convection and evaporation and, therefore, comfort ventilation in warm weather is primarily a matter of creating effective air velocities as by circulating fans rather than of exchanging interior and exterior air. (See also AIR CONDITIONING).

Industrial.—The importance of pure air to the prevention of toxic illness is vastly greater even than pure food and water since in a working day a man may inhale 30 pounds or more of air whereas he will eat and drink only a small fraction of that weight. The vast majority of dusts, fumes, and vapors, that may be found in the atmosphere of modern industry are more likely to be disagreeable than demonstrably harmful to health. It is rarely possible to maintain the atmosphere completely free of contamination and indeed that is not necessary. Man can tolerate without injury certain small amounts of any toxic substance, and the factory ventilation problem therefore reduces to one of maintaining atmospheric concentrations of dust and other impurities, below the tolerable level whether for health or comfort. These levels have been deduced for a number of common industrial substances and furnish a basis for appraisal of industrial air purity by application of the techniques of analytical chemistry. Such appraisal constitutes a major activity in the field of industrial hygiene.

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VENTNOR, vēnt'nēr, England, a pleasure resort on the southeast coast of the Isle of

Wight, eight miles southeast of Newport. It is beautifully situated on a terraced site and has an excellent climate. Besides churches and chapels it has a Benedictine convent school; a literary and scientific institution, with library and museum; Albert Hall; convalescent homes and the usual conveniences of a seaside resort, hotels, boarding houses, esplanades, pier, and park. Pop. (1931) 5,930.

VENTRILOQUISM, vĕn-trĭl'ô-kwĭz'm (Lat. *venter*, belly + *loqui*, past part. *locutus*, to speak), the art of speaking in such a way as to cause a hearer to believe that the sound comes not from the person speaking but from a different source. The name originated from the erroneous supposition that the sounds uttered were formed in the abdomen, whereas it is practice alone that produces the illusion to a high degree of perfection. The sounds are formed by the same organs as the usual emissions of sound—the larynx, the palate, the tongue, and the lips. The art of the ventriloquist consists merely in this: After drawing a long breath he breathes it out slowly and gradually while he talks, ingeniously modifying the sound of the voice by the muscles of the larynx and the palate; besides this he moves his lips as minutely as possible and by various contrivances diverts the attention of his auditors. This art was known to many of the ancients, and appears to antedate recorded history. It is practiced by wandering magicians in many semi-civilized countries; it is still a common form of entertainment on radio programs and the vaudeville stage.

VENTURA, vĕn-tōō'r'ā, city, California, Ventura County seat, altitude 48 feet, on the Pacific Ocean (between the Ventura and Santa Clara rivers), the Southern Pacific Railroad, and federal highways, 68 miles north of Los Angeles and 400 miles south of San Francisco. The name of the post office is Ventura. The legal name of the city is San Buenaventura, the name of the Spanish mission established by the Franciscan Father Junipero Serra in 1782, still in use. There is a statue of Father Junipero here, a historical museum and some old adobe houses. It is in a fruit and oil country and is a shipping point for the many agricultural products of the section—beans, oranges, lemons, apricots and English walnuts—and for oil tankers from its harbor. Oil well supplies, machinery, and railway repairs are the main industries. The city has a fine courthouse, a junior college, a public library, Ventura County Library, three hospitals, and a state school for girls. It has a mayor and council with city manager. Pop. (1940) 13,264; (1950) 16,534.

VENTURA DE RAULICA, vān-tōō'r'ā dā rou'lĕ-kā, **Giacchino**, Italian theologian and orator: b. Palermo, Italy, Dec. 8, 1792; d. Versailles, France, Aug. 3, 1861. He entered the Jesuit college of his native city and subsequently was received as a novice by the Theatines. He later was made censor of the press and a member of the royal council of public instruction for the kingdom of Naples. He became distinguished for his funeral orations, one of which, on Pius VII, gained for him the name of the "Italian Bossuet." In 1824 he was appointed general of the Order of the Theatines, fixed his residence at Rome and was presented to the chair of ecclesiastical law

in the University of Rome. In 1828 he published his work *De Methodo Philosophandi* in defense of the Christian or scholastic philosophy. This was bitterly attacked by his friend, the Abbé Lamennais, and, wearied of controversies, Ventura left Rome and spent 10 years in retirement.

During this period he preached his finest sermons, including the funeral sermon of the Irish national leader, Daniel O'Connell. The liberal opinions expressed in this sermon gave him great influence with the people.

In 1848, the government of Sicily made him minister plenipotentiary to the court of Rome. On May 4, 1848, he left Rome and retired under the protection of the French to Civita Vecchia and afterward to Montpellier in France. Here he wrote *Letters to a Protestant Minister* (1849). Settling in Paris he drew crowds to the churches of the Madeleine and Saint Louis d'Antin by the eloquence and originality of his discourses.

Among his publications are *Histoire de Virginie Bruni* (1850), *Les Femmes de l'Évangile* (1853), *La Raison Philosophique et la Raison Catholique* (1852), *Essai sur l'Origine des Idées* (1853), *La Femme Catholique* (1854), *Le Pouvōir Chrétien* (1857).

VENUE, in law, the place, county or district where an action is to be tried and whence juries are to be summoned for trial of causes. In local action, as of trespass and ejection, the venue is to be from the neighborhood of the place where the lands in question lie; and in all real actions in the United States the venue must be laid in the county where the property is for which the action is brought. Where a defendant verily believes that he cannot receive a fair trial in the county where action is brought against him he is entitled to ask for a change of venue to a locality where there are no prejudices against him or his case. The convenience of witnesses who may be called is another reason for granting a change of venue. See also JURISDICTION.

VENUS, the Roman name of the goddess of love, identified by the Romans with the Greek goddess Aphrodite. In the *Iliad* she is described as the daughter of Zeus and Dione, but Hesiod represents her as the offspring of Uranus, born among the foam of the sea. She surpassed all other goddesses in beauty and hence received the apple which was to be awarded to the most beautiful by Paris. She was the wife of Hephæstus (Vulcan), but would scarcely be considered a faithful consort, as she bestowed her love on the gods Arēs, Dionysos, Hermes and Poseidon, and the mortals Anchises and Adonis. Among her children were Eros (Cupid), Anteros, Hymen and Hermaphroditus. She had the power of granting beauty and irresistible charms to her votaries. Among plants the myrtle, rose, poppy, apple and other fruits were sacred to her, and among animals the dove, sparrow, swan, swallow, ram, hare and tortoise. The chief places of her worship in Greece were the islands of Cyprus and Cythera. Before she was identified with the Greek Aphrodite, Venus, the Roman goddess, was one of the less prominent divinities in the religion of the Romans, yet her worship seems to have been established in Rome at an early period. Here several temples were erected to her at different times and under different names. In the best days of art this god-

dess was sometimes represented draped, at other times nude. The most celebrated ancient statue of Aphrodite was that in Cnidus by Praxiteles; there are copies of it in the Vatican and at Munich. Consult Gayley's *Classic Myths in English Literature* (Boston 1911).

VENUS, second planet in order of distance from the Sun and, in many respects, the twin of the Earth. The mean distance from the Sun is 67,273,000 miles or 0.723 astronomical units, while the orbit has an inclination of $3^{\circ}.4$ and an eccentricity of 0.0068, thus being almost a circle. Its period of revolution is 224.7 days, and being always inside the Earth's orbit, the planet goes through all phases, as does Mercury. Its greatest elongation from the Sun is 48° , hence at most it must set some 3 hours later or rise 3 hours earlier than that body. Therefore it is either visible in twilight or, if in full darkness, it must be very low in the sky. This means that many of the best observations of the planet are made in daylight. Next to the Moon it is the most brilliant body in the heavens. It can approach the Earth to within 24 million miles at inferior conjunction, while at superior it may be 162 million miles distant. Hence its apparent diameter varies from $66''$ to $10''$. Near least distance it is seen in crescent phase, near elongation one half the illuminated hemisphere is turned towards us. Its diameter is 7,700 miles. In terms of the Earth, its mass is 0.82, density 0.89, surface gravity 0.86, and heat received per unit area 1.91. The actual surface is never visible to us as Venus is clothed in an apparently impenetrable cloud mantle. Photographs taken with various color screens seem to reach part way into this cloud layer and show a sort of stratification, which may indicate zonal circulation resembling our trade winds. Direct telescopic observations by the best observers show, at most, shadings of irregular form and sometimes a deformation of the cusps, but little reliance can be placed in the details of the drawings, as nothing is really sharp. Earlier observers thought they detected a rotation of about a day, but later work discredits them. It is calculated that were the planet to rotate in less than 15 of our days it could be detected spectroscopically. As this cannot be done, obviously the rotation takes longer. However, work with delicate heat-measuring instruments proves that, when Venus shows a narrow crescent, all across the dark part of the disk the temperature is about equal. This seems quite a clear proof of circulation, which can only be accounted for by rotation. The general opinion now is that Venus rotates in from 25 to 30 of our days, or in round numbers about eight times per revolution. As the inclination of its axis is not certainly known, its seasons cannot be visualized.

An atmosphere's presence is further proved spectroscopically, and from there being a ring of light around the planet near inferior conjunction or at transit. How high this atmosphere extends from the surface, or even how high the tops of the cloud layers are, remain conjectural. The best authorities differ. Due, however, to the greater radiation from the Sun, we might expect the cloud layers to be higher than for our Earth. So far, the spectroscope has been able to detect large amounts of carbon dioxide, but no certain traces of either oxygen or water vapor. If neither of these is present in appreciable quantities, life as we know it would be impossible. However, even

yet there is just a possibility that, if the tops of the cloud layers lie very high above the surface, in the stratum below these, gases might be found. If they are not, there is no life on the one planet whose existence we know of, where otherwise conditions would seem quite favorable for a development such as we find here. Were there intelligent beings on Venus, the deep, cloudy mantle always covering their daytime sky would keep them from seeing even the Sun, as a rule, if ever. Perhaps their night skies may be clearer. It is difficult to realize the enormous effect upon our intellectual development that the knowledge of bodies existing outside our Earth must have had. Venus has no satellite.

Transits of Venus are fully treated of in the article TRANSITS, and will not be mentioned further here more than to say that the next two occur on June 9, 2004 and June 6, 2012.

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VENUS' FLOWER-BASKET, one of the glass-sponges (q.v.).

VENUS' FLYTRAP. A perennial insectivorous herb of the natural order *Droseraceae*. A native of the Carolinas and perhaps Florida, it has a somewhat bulbous rootstock from which all leaves proceed direct. Each leaf has a long stalk which is winged on each side, the blade of the leaf forming two nearly half circular lobes, whose outer margins are fringed with sharp rigid spikes. These lobes close together, under certain conditions, when the fringe of spikes interlock like the teeth of a rat gin. In the center of each lobe stand three sensitive filaments, and when either of these is touched by any insect the lobes immediately shut together, entrapping the insect. See *DIONAEA MUSCIPULA*.

VENUS GENETRIX, jèn'è-trîks, a statue of Venus set up in a splendid temple by Julius Caesar in the forum laid out by him just after his victorious return from his campaign against Pharnaces (46 B.C.). He took the title from the first words of the proemium with which the poem of Lucretius *De Natura Rerum*, then only a few years published, opens—"Aeneadum Genetrix," "Mother of the Descendants of Aeneas." Julius Caesar traced his descent with that of the whole Julia gens to Iulus, the son of Aeneas, the latter being the son of Venus, according to the Trojan cycle, by Anchises. Hence the whole Roman people were called upon to look upon Venus as their divine ancestor. Hadrian added the title "Victrix," victorious, to that of Genetrix, in 134 A.D. and built a double temple to her honor near the Colosseum. The statue which is commonly known as *Venus Genetrix* is the copy of a Greek original, now in the Louvre, Paris; but the marble statue of the same name in the Vatican is really the only copy extant of the bronze statue by Arcesilaus which stood in the temple built by Caesar in his forum, the Forum Julium.

VENUS' GIRDLE, an oceanic ctenophoran (see CTENOPHORA) remarkable for its shape, which is that of a ribbon, sometimes nearly five feet in length and about two inches in width—a filmy, semi-transparent undulating creature long ago named *Cestus Veneris*, "girdle of

Venus." This shape is due to thin wing-like expansions in a vertical plane from opposite sides of the body which is in the middle of the "ribbon," and conforms to the ordinary ctenophoran, especially when young. Two of the ciliated swimming plates are extended along the upper and lower edge of the ribbon, and the creature swims by the aid of them and by an undulatory action. This curious and elegant jellyfish occurs frequently in warm seas, at all distances from land. *C. veneris* is a common species of the Mediterranean and the Atlantic.

VENUS OF MEDICI, má'dê-chê; Angl. mēd'ê-, mā'dê-, an antique statue found in Rome in the sixteenth century. It was broken into 11 fragments while Cosimo III de' Medici was having it transported to Florence. It has since been restored and is in the Uffizi Gallery in Florence. It represents the nude figure of the Greek goddess Aphrodite (with whom the Roman goddess became identified) rising from the foam of the sea. There is much beauty and charm in the face and form, but its conception is a self-conscious one. It belongs to the decadent period of Greek art during which the repose and somewhat hieratic action of sculpture had given place to the expression of monetary emotions. The *Venus of Medici* was probably copied from Praxiteles *Aphrodite of Cnidus*. The signature of Cleomenes at its base is generally considered a forgery.

VENUS OF MILO, mē'lō, or **MELOS**, mē'lōs, a celebrated Greek statue now in the Louvre, Paris. It was found on the island of Melos in 1820. The French ambassador to Constantinople bought it and presented it to Louis XVIII who gave it to the Louvre. Though some critics place it in the fourth or fifth century B.C., it is generally dated about the first century B.C., during the Hellenistic period of Greek sculpture. The statue represents a woman of heroic proportions, undraped to the hips, standing with the weight on the right foot and with the head turned slightly to the left. The arms are broken off, and their original position has been much disputed. Because of its exquisite beauty and workmanship, it is considered by many the supreme example of ancient Greek sculpture.

VENUSBERG, vē'nūs-bürg; Ger. vā'nōös-bërk, popularly identified with HÖRSEL BERGE, the mountains in northwest Thuringia, Germany, where according to medieval German legend, Venus held her court in a cave. There she entertained Tannhauser who is said to be the only mortal man to enter her court who escaped damnation. See TANNHAUSER.

VENUS'S LOOKING GLASS, the popular name of a genus of annual herbs, especially the species *Specularia speculum*, which gives its name to the genus *Specularia*. The popular name, Venus's looking glass, is from the Latin *Speculum veneris*. These pretty little plants, bearing blue, white and purple flowers, have long been a favorite in gardens, especially as border annuals. A distinguishing feature is the long calyx-tube which suggests the handle of a mirror. There are about 10 species occurring in the northern hemisphere and one in southern Australia. *S. speculum* grows about nine inches high and bears brilliant blue flowers. The familiar North Amer-

ican species is *S. perfoliata*, distinguished by its perfoliate, wavy-toothed leaves which clasp the stem with their cordate bases. Though it is a weed, the plant blooms attractively when grown in good, moist soil in fairly shady places.

VERACRUZ, vē'r'à-krōōz'; Sp. bā-rā-krōōs', a state in east central Mexico, on the Gulf of Mexico; bounded by the states of Tamaulipas on the north, Oaxaca on the south and southwest, Chiapas and Tabasco on the southeast, San Luis Potosí, Hidalgo and Puebla on the west. Its area covers some 27,736 square miles; it is long and narrow in shape, running about 435 miles along the coast and extending inland about 50 miles. Veracruz is mostly a mountainous region, with a narrow border of hot, unhealthy coast below the Sierra Madre range, which occupies its central and western portions. Citlaltetpetl or Orizaba, the highest peak in Mexico, rises 18,700 feet in the central part of the state. Cofre de Perote, at 13,552 feet, is another noteworthy peak. The Lake of Tamiahua, its largest lake, is a coastal lagoon about 60 miles long, located in the northern part of the state. There are numerous rivers, the chief navigable one being the Coatzacoalcos. Rainfall is heavy in Veracruz and there is an exceedingly heavy growth of tropical vegetation.

Veracruz was the center of an ancient civilization which existed before the Incas. It contains many interesting ruins. Today it is an important agricultural state and a rich mining area. Leading agricultural products are cereal, corn, beans, fruits and vegetables as well as sugar cane, rum, cotton, tobacco, cacao, coffee and vanilla beans. From the natural pasture lands in the central highlands, cattle and hides are exported. The forest regions yield rubber, dyewoods, cabinet wood, chicle, jalap, and orchards. A list of manufactures includes cotton, tobacco, paper, chocolate, soap and matches. The chief cities are Veracruz, Orizaba, Córdoba, and Coatzacoalcos. The capital city is Jalapa (q.v.). Pop. (1940) 1,614,579.

VERACRUZ, one of the chief ports of Mexico; located on the Gulf of Mexico; about 264 miles from Mexico City; in the state of Veracruz. It is situated on a beach a few feet above sea level; its harbor is protected by breakwaters constructed on small islands and reefs. It was here that the Spaniards first set foot on Mexican soil, when Hernando Cortes landed in 1519. He called it La Villa Rica de la Vera Cruz (the Rich Town of the Holy Cross). The original settlement was moved elsewhere but it was re-established in 1599, and in the 16th and 17th centuries it served as a port for the Spanish fleet. Its lack of natural fortifications led to pillaging by pirates, especially in the years 1653 and 1712. As a result, the celebrated fortress of San Juan de Ulúa was built on one of the islands in front of the port city. It was captured during the Mexican War by Gen. Winfield Scott on March 29, 1847. Veracruz also was captured by the French, first in 1838, and again in 1861. In 1914 United States troops occupied the city for seven months during a conflict with President Huerta which led to his resignation. Veracruz is the terminal of several railroads including the Mexican Railway and the Inter-oceanic Railway. It also is served by a Mexican airline and its harbor maintains excellent steam-

ship service. Veracruz manufactures cigars, chocolate, liquors, tiles and footwear. Its fine port facilities make it an export and import trade center. The city is an interesting mixture of the old and the new, with its quaint old houses on narrow, cobbled streets contrasting with new, modern structures on broad thoroughfares. The principal buildings are the colonial fortress of Santiago; the federal custom house; the lighthouse service headquarters; the city hall; the railroad station and Hotel Terminal; and the naval school. The Castillo de San Juan de Ulúa built in 1565 is located on Gallega Island about a mile from the mainland. This famous old fortress, which was also used as a prison until 1914, now serves as part of the breakwaters around the reefs. Not far from Ulúa is the Isla de los Sacrificios (The Isle of Sacrifices), a resort spot with archeological ruins. Several fine plazas provide breathing spaces for the public. On the Plaza Constitución is a parish church built in 1721, and on the Plaza Zamora, or the Alameda, is a bronze statue of Manuel Gutiérrez Zamora, a former governor of the state of Veracruz. There is also a monument to Benito Juárez, built to commemorate the Reform Laws, in the Parque Porfirio Díaz. Population (1940) 71,679.

VERACRUZ, Capture of, in the Mexican War. While the battles of Palo Alto, Resaca de la Palma, Monterey and Buena Vista (qq.v.) were being fought, an expedition was being organized by Gen. Winfield Scott (q.v.) to strike inland from the coast and capture Mexico City. On March 9, 1847 Scott landed on the beach a few miles south of Veracruz with 10,000 troops and a siege train. The city was completely invested and it was summoned on the 13th. Gen. Juan Morales, in the meantime, had garrisoned the redoubtable fortress of San Juan de Ulúa with 1,200 men and the town with 3,800. He refused to surrender, and on the 22nd Scott opened the bombardment with the aid of naval guns placed near the city walls. After four days and four nights of bombardment the city was partially destroyed and a flag of truce appeared. Morales yielded his command to Gen. Landero who surrendered the city on the 29th. There were 19 American soldiers killed and 63 wounded; the Mexicans lost 80 soldiers and 100 civilians. After cleaning and garrisoning the city, Scott used it as a port base for the remainder of his campaign. Subsequently he fought the battles of Cerro Gordo, Contreras, Churubusco, Molino del Rey and Chapultepec (qq.v.), and finally entered Mexico City in triumph.

Consult Scott, Gen. Winfield, *Memoirs of Lt. Gen. Winfield Scott*, 2 vols. (New York 1864); Rives, G. L., *The United States and Mexico, 1821-1848*, 2 vols. (New York 1913); Smith, Justin H., 2 vols., *The War with Mexico* (New York 1919); and Bill, A. H., *Rehearsal for Conflict* (New York 1947).

VERAGUA, bâ-rá'gwä, Duke of, dukedom created for the lineal descendants of Christopher Columbus. See COLUMBUS, LUIS.

VERATRINE, or CEVADINE, C₃₂H₄₆O₉N, a vegetable alkaloid, one of a series found in sabadilla seeds. Cevadine is a synonym for veratrine. It was introduced in 1878 to distinguish the crystalline veratrine which is colorless, highly poisonous, almost insoluble in water but soluble in alcohol and ether. Its melting point is 205°C. It is decomposed by hot potassium hydroxide into cevine and cevadic acid. In medicine it is

used as a liniment or ointment for external application in cases of acute neuralgia and arthritis. Locally, it is an active irritant. It is also a powerful muscle and nerve poison.

VERATRUM, (Lat. hellebore), a genus of hardy, perennial herbs belonging to the Liliaceae family. They are commonly called hellebores but are not true hellebores. There are about 18 species of *Veratrum* growing in temperate regions. They thrive in moist, shady places. The American hellebore, *V. viride*, is used medically as a nervous, cardiac, and respiratory sedative. *V. viride* and *V. album*, the white hellebore, are grown as ornamental perennials, but since both species contain the highly toxic alkaloid veratrine, gardeners should be cautious of their poisonous qualities. See HELLEBORE.

VERBANIA, vār-bā'nyä, commune in northwest Italy; in Novara province, Piedmont; on west shore of Lake Maggiore. It has a museum and a 15th century church. Verbania was formed in 1939 by the union of the former communes of Intra and Pallanza. It is a summer resort. Pop. (1936) 21,753.

VERBECK, vūr'bĕk, Guido Fridolin, missionary to Japan; b. Zeist, Netherlands, Jan. 23, 1830; d. Tokyo, March 10, 1898. He was educated in the Moravian school at Zeist and prepared for the engineering profession at the Polytechnic Institute in Utrecht. He came to the United States in 1852, where he eventually went to Arkansas to work as an engineer. After a serious illness, Verbeck decided to enter the Presbyterian theological seminary in Auburn, N. Y., where he graduated and was ordained in 1859. In answer to a call put out by the Dutch Reformed Church in America, he sailed for Japan as a missionary that same year with his bride. Before long Verbeck, who had a talent for languages, was called upon by the Japanese government to head a school for interpreters in Nagasaki. Many of his students later became national leaders. In 1869 he was asked to take charge of a school in Tokyo which developed into the Imperial University. Japanese statesmen sought his advice in their efforts to reorganize Japan into a modern, progressive country. In 1873, he became attached to the government in an advisory capacity. Verbeck also was responsible for the translation of the Code Napoleon, European constitutions, the American Constitution, and other vital, legal documents of Western civilization. In 1879 he retired to purely missionary duties.

VERBENA, a genus of plants typical of the family Verbenaceae. It also is the ancient Latin name of the common European vervain, *V. officinalis*, formerly used in witchcraft and in religious ceremonies of the Romans and druids in Gaul. The species of Verbena, of which about 100 have been described, are mostly annual and perennial herbs or shrubs distributed mainly in the American tropics but about 20 species extend northward into the United States, and a few occur in Europe. Some weedy species known as vervains occur in the United States and Canada, including *V. officinalis*, which originates in Europe. Verbenas are characterized by erect or trailing stems which usually bear opposite leaves and terminal spikes, sometimes with showy flowers. The fruit consists of four nutlets. Some

of the species are widely popular as ornamental garden plants. The fragrant, showy flowers occur in clusters of a dozen or more and range in color from white through rose and lilac to purple. The garden verbenas, which are hybrids, are derived mainly from South American species, such as *V. phlogiflora*, *V. chamaedryfolia*, *V. incisa*, and *V. teucrioides*. The North American *V. canadensis* apparently also has been hybridized by horticulturists. The fragrant lemon verberna, *Lippia citriodora*, rightly belongs to the *Lippia* genus. Because of the difficulties encountered in tracing verbenas botanically, they are usually grouped according to color. The Selves are one-color varieties, the *Oculatas* are eyed, and the Italians striped.

Garden verbenas thrive in any usual garden soil. They usually are grown from seeds started indoors in February or March, or outdoors with the arrival of warm, settled weather. Flowering plants generally arrive in July or early August. Verbenas must, however, be propagated from cuttings when choice varieties and colors are desired. Cuttings usually are obtained from old plants early in the autumn and started in a mild hotbed the following April. When put out for spring bedding sometime in May, they should be bent down almost horizontally so as to take root readily. A rich, sandy loam facilitates rooting. Plants secured from cuttings tend to flower early. See VERBENACEAE.

Consult Bailey, L. H., *The Standard Cyclopedia of Horticulture* (New York 1944).

VERBENACEAE, a family of herbs, shrubs, and trees of the tropical and temperate zones. The Vervain family is distinguished by irregular flowers and with complete ovaries. It has about 70 genera and 750 species, 11 of which reach northeastern United States. Among the score of genera cultivated for ornament in North America are *V. callicarpa*, greenhouse or hardy shrubs; *V. clerodendron* (Turk's Turban), also greenhouse or hardy shrubs; *V. vitex* (Chaste Tree, Hemp Tree, Monk's Pepper Tree), semi-hardy shrubs or trees; and *V. verberna*, bedding or hothouse herbs. *Tectona grandis* of India and the East Indies is an important source of teakwood. Many species have been used medically; *Verbena hastata* yields bitters, and species of *Lippia* tonics.

VERBOECKHOVEN, vĕr'bōōk-hō-vĕn, **Eugene Joseph**, Belgian painter: b. Warneton, West Flanders, June 9, 1798; d. Brussels, Jan. 19, 1881. His father, who was a sculptor, taught him to draw and model. Verboeckhoven became universally celebrated for his animal paintings done with a suggestion of Paul Potter's style. He is especially well-known for his landscapes with cattle. Sheep and horses were other favorite subjects. The outstanding feature of his objective art is his careful drawing and the refinement and smoothness of his artistic execution. His work may be viewed in many European and American galleries.

VERCELLI, vŭr-sĕl'ĕ, capital of the province of that name in Piedmont, Italy; on the Sesia River, 39 miles west-southwest of Milan. Anciently it was called Versellae. Nearby, Marius defeated the Cimbri (101 B.C.). A city-state during the Middle Ages, the Visconti family of Milan dominated it from 1335 for nearly a century, until 1427 when the dukes of Piedmont-

Savoy began their rule. It has a castle with a basilica dating from the early 13th century. The cathedral was remodeled in the late 16th century; in its library is preserved the famous *Vercelli Book* (q.v.). It is a trade center for the exportation of rice. Pop. (1936) 38,956.

VERCELLI BOOK, or CODEX VERCELLENSIS, a manuscript of Old English sermons and religious poems including a prose *Life of Guthlac*, discovered in 1822 in the cathedral library of Vercelli, Italy. The writing dates it as of the early 11th century. R. Wülker, who published a facsimile at Leipzig (1894), believed it had been brought to Vercelli by Cardinal Gualo, a native of that city and its bishop in 1219, upon his return from England where he had served some years as papal legate. The codex may have belonged to a hospice for English travelers which the cardinal founded, or have been among the treasures of his own large library which he bequeathed to the monastery of San Andreas, also of his founding.

VERCINGETORIX, vŭr-sĭn-jĕt'o-rĭks, Gallic chief of the Arverni: b. Auvergne, c.72 B.C.; d. 46 B.C. He led the rebellion which started the Gallic War, and fought successfully against Caesar until he was besieged by him in Alesia. In 52 B.C. he was forced to surrender. Later he was taken to Rome, exhibited at Caesar's triumph in 46 B.C., and then put to death. A description of the youthful warrior may be found in Volume 27 of Caesar's *Commentaries*.

VERD ANTIQUE. See SERPENTINE.

VERDE, river, Arizona, formed by the confluence of forks in Yavapai County. About 120 miles long, it flows into Salt River near Phoenix.

VERDE, vŭr'dĕ, **ISLAND**, in the Philippine Islands; about three miles south of Luzon; seven square miles, five miles long; part of the municipality of Batangas, Luzon. The island, which is in the center of the Verde Island Passage, was seized by American forces on Feb. 26, 1945. Pop. 2,947.

VERDEN, fār'dĕn, German city in the province of Hanover, Prussia; on the Aller River; 57 miles southwest of Hamburg. It has a Gothic cathedral and its chief industries are the manufacture of cigars, soap, furniture, tile and brandy. Verden was founded about 800 A.D. as a bishopric. Later it became a duchy and was ceded to Sweden. In 1719 it passed to Hanover which was annexed by Prussia in 1866. Pop. (1939) 12,258.

VERDI, vār'dĕ, **Giuseppe Fortunino Francisco**, Italian operatic composer: b. Le Roncole, near Busseto, Parma, Oct. 10, 1813; d. Milan, Jan. 27, 1901. He received his early musical education from Antonio Barezzi, a local musician, and Francisco Provesi, *maestro di cappella* of the cathedral of Busseto and conductor of the municipal orchestra. Verdi later wrote many marches and other instrumental pieces for this orchestra. He wrote his first symphony, which was performed in 1828 at the age of 15. In 1832 he went to Milan to continue his musical studies, but his application for a scholarship at the Conservatorio was rejected for lack of musical ability, according to the report of the

director. He then studied composition and instrumentation with Vincenzo Lavigna. Upon his return to Busseto, he became conductor of the Filarmonica and organist of San Bortolomeo. From 1838 he was again at Milan, where his first opera, 'Oberto, Conte di San Bonifacio,' was presented with considerable success at La Scala (1839); 'Un Giorno di Regno' (1840), called "un bazar de reminiscences," was an utter failure, but 'Nabuccodonosor' (1842), to a Biblical libretto by Solera, was received so well as at once to establish his reputation. 'I Lombardi' (1843) and 'Ernani' (1843), with libretto from Hugo's 'Hernani,' were even more pronouncedly successful. The Austrian government in both cases made objections to the revolutionary ideas contained in the works. The political demonstrations of the time were no doubt of aid to the composer, and, in fact, the name Verdi was employed by the patriot party as an acrostic for Vittorio Emanuele Re D'Italia. 'Ernani' was the first of Verdi's works to be produced in England. He was now kept busy supplying impresarios with operas. Most of these were inferior to his earlier successes. Perhaps the worst was 'I Masnadieri,' which Verdi traveled to London to conduct (1847), but could not redeem. Yet with 'Rigoletto' (1851) he entered his most brilliant period. This, with 'Il Trovatore' (1852) and 'La Traviata' (1853), are classed as marking his second manner. They reveal a great advance over 'Ernani' in the treatment of both voice and orchestra. Their success in and beyond Italy was very great. They confirmed Verdi's reputation and they have remained incorporated in the general repertoire of Italian opera. Then followed another series of semi-failures. 'Les Vêpres Siciliennes' (1855), written for the Paris Opera, to be produced during the Universal Exhibition, had, indeed, a somewhat temporary success, and 'Un Ballo in Maschera' (1859) has been at intervals revived. Orsini having recently (13 Jan. 1858) made an attempt on the life of Napoleon, the scene of the latter was changed from Sweden to Boston, Mass., and one Riccardo, Earl of Warwick and colonial governor, was assassinated instead of Gustavus III. Verdi was now working out a new method of expression, liberated from the traditional utterance of the Italian school. With 'Aida,' on an Egyptian subject, written at the request of Ismail Pasha and presented at Cairo in 1871, he first declared his third manner, revealing to a considerable degree Wagnerian influence, without, however, surrendering the leading features of Italian music. The orchestral resources were greatly increased but the vocal score was still the major part of his scheme. A 'Requiem Mass,' his only non-operatic work of considerable importance, written in 1874 in commemoration of the death of Manzoni, applied this new manner to sacred music. It was the centre of much discussion, being attacked by von Bülow and defended by Brahms. A revised version of 'Simone Boccanegra,' a work which had failed in 1857, was presented with much success at Milan in 1881 and in 1887 'Otello,' with a libretto by Boito, who had largely rewritten that of 'Simone Boccanegra.' Here and in 'Falstaff' (1893), a comic opera, with a libretto also by Boito, there is an increase in dramatic characterization. In

1898 Verdi wrote four sacred works, a 'Te Deum,' a 'Stabat Mater,' an 'Ave Maria' and 'Laudi alla Virgine' (words from Dante). Besides these and the Manzoni 'Requiem,' he wrote for the most part little save operas and a string quartet (1873). A chronological list of his operas is as follows: 'Oberto' (1839); 'Un Giorno di Regno' (1840); 'Nabuccodonosor' (1842); 'I Lombardi' (1843); 'Ernani' (1844); 'I Due Foscari' (1844); 'Giovanna d'Arco' (1845); 'Alzira' (1845); 'Attila' (1846); 'Macbeth' (1847); 'I Masnadieri' (1847); 'Il Corsaro' (1848); 'La Battaglia di Legnano' (1849); 'Luisa Miller' (1849); 'Stiffelio' (1850); 'Rigoletto' (1851); 'Il Trovatore' (1853); 'La Traviata' (1853); 'Les Vêpres Siciliennes' (1855); 'Simone Boccanegra' (1857; rev. 1881); 'Aroldo' (revision of 'Stiffelio,' 1857); 'Un Ballo in Maschera' (1859); 'La Forza del Destino' (1862); 'Don Carlos' (1867); 'Aida' (1871); 'Otello' (1887); 'Falstaff' (1893); 'Quattro pezzi sacri' (1898). In his work Verdi was greatly aided by his wife, the famous prima donna, Giuseppina Strepponi, whom he married in 1849, after she had made a successful appearance in several of his operas.

Bibliography.—Bellaigne, C., 'Verdi' (Paris 1911); Crowest, F., 'Verdi: Man and Musician' (New York 1897); Garibald, F., 'Giuseppe Verdi nella vita y nella arte' (Florence 1904); Pongin, 'Verdi, an Anecdotic History of his life and works' (1887); Perinello, C., 'Giuseppe Verdi' (Berlin 1899); Roncaglia, G., 'Giuseppe Verdi' (Naples 1914); Sofferdini, G., 'Le Opere di Verdi' (Milan 1901); Visetti, A., 'Verdi' (New York 1905); Bonavia, F., 'Verdi' (1930).

VERDICT, in law, the finding of a jury in a civil or criminal case legally submitted to them and later recorded. A verdict is general when the jurors render a complete decision upon the facts as established by the evidence and properly apply the law thereto as presented by the charge of the court. A verdict is special when the jury merely find the facts in detail, leaving the court to apply the law. The jury may bring in a special verdict in criminal cases, but they are not compelled to do so in any case. A verdict which is illegal may be set aside in civil proceedings, but in criminal cases a verdict of acquittal is conclusive. A verdict must be unanimous or it is void. At present the restrictions surrounding a jury while they are deliberating on a verdict are very much less severe than formerly.

In criminal cases a prisoner has the right to be present when the verdict is rendered and has the further right to "poll" the jury; in other words, to call each juror by name and ask him if the verdict found is his verdict.

In case a verdict may not be found until after adjournment of court for the day, the judge may direct the jury to bring in a sealed verdict, which is delivered to an officer of the court and held until court reconvenes. By the weight of authority a prisoner charged with felony cannot waive the right to the verdict of a jury. The verdict is usually announced by the foreman of a jury in open court. In Scotland the verdict of "not proven" is allowable in criminal cases. This acts as a bar to a second trial on the same charge, but does not exonerate the accused.

VERDIGRIS, a basic acetate of copper that is prepared by exposing copper plates to the action of dilute acetic acid or weak vinegar. It is a blue-green amorphous powder, is very poisonous and is used as a pigment, as a mordant and to some slight extent in medicine. The green rust common on copper that has been long exposed to the atmosphere also bears the name. As a pigment it is useful, mixed with white lead and as an ingredient in copper paints. As a poison it irritates, the most familiar antidote being raw white of egg and warm milk.

VERDIN, or **GOLDTIT**, a small yellow bird (*Auriparus flaviceps*) of southern California and Mexico, which is one of the most attractive in habits and voice of the birds of that region. It is allied to the titmice.

VERDUN, vĕr-dūn, France, a fortified town in the department of the Meuse, in a valley on the river of that name, 150 miles northeast of Paris. It has a citadel, the work of Vauban, and is defended by 11 detached forts of modern construction which extend to Toul. Probably no city in Europe is more completely fortified. The ring of forts has a circumference of over 30 miles, with a diameter of 10 miles. There are 16 main forts and 21 smaller batteries in the circle. The arrangement presents a double front to the northeast and when the Germans invaded the first line they were subject to a cross fire from adjoining heights. The most important forts are Hardimont, Vaux, Lanfee, Mardi Gras, Eix, Moulœville, Manezel and Chatillon. These overlook the Valley of the Meuse and have proved as impregnable as modern ingenuity could devise. The principal buildings are the cathedral, which dates from the 11th and 12th centuries, the bishop's palace, and the hôtel de ville. The liqueurs and confectionery of Verdun are famous. The town was captured by the Germans (after a spirited defense) on 9 Nov. 1871. In the great war some of the heaviest fighting and most severe artillery fire the world has ever seen occurred around Verdun, which was long the farthest outpost retained by the French on the northeast front. See WAR, EUROPEAN.

VERDUN, Canada, city of the Province of Quebec, a suburb of Montreal. It has several large manufacturing establishments; is served by the Canadian Pacific and the Canadian National railways. Pop. (1931) 60,745.

VERE, vĕr, **SIR Aubrey Hunt**. See DE VERE, SIR AUBREY HUNT.

VERE, **Aubrey Thomas**. See DE VERE, AUBREY THOMAS.

VERE, **Edward de**, 17TH EARL OF OXFORD, English wit and poet: b. England, 2 April 1550; d. Newington, Middlesex, 24 June 1604. He was educated at Cambridge, and at 12 succeeded to the earldom with its hereditary dignities, including that of lord great chamberlain of England. He became prominent at the court of Elizabeth when still a boy, took his seat in the House of Lords in 1571, and was subsequently a noted figure in court circles. His wit and poetical gifts made him a favorite with Elizabeth, who showered him with attentions; he was famous for his wild extravagance which eventually dissipated his patrimony; and as his years increased he became more than ever eccentric, while his temper, never con-

trolled, acquired a violence which endangered even his favor with the queen. As lord high chamberlain he presided at the trial of Mary, Queen of Scots, in 1586, and at that of the Earl of Arundel in 1589. He was the author of several popular comedies which have been lost, and his poetry displays much lyric beauty. Of the latter some 23 pieces have been proved as his work, though most of it has perished with his comedies. His extant verse was collected and printed by Grosart in 'Miscellanies of the Fuller Worthies Library' (1872).

VERE, **SIR Francis**, English soldier, grandson of the 15th Earl of Oxford: b. Crepping Hall, Essex, 1560; d. London, 28 Aug. 1609. He entered the army in early youth, served under the Earl of Leicester in the Netherlands in 1585, and in 1588 his conduct at the defense of Bergen-op-Zoom won for him the honor of knighthood. He prepared the way for the capture of Zutphen in 1591, was engaged in the taking of Nimeguen in that year, and in 1592 relieved Prince Maurice at Koevorden. He remained in the Netherlands until 1595, and in 1596 he led the expedition against Cadiz. He was again ordered to Holland in 1597, engaged with Prince Maurice at Tumbout, and in 1598 was appointed governor of Brill and general of the forces in the Netherlands. At the battle of Nieuport in 1600 he performed service which turned the tide of battle in favor of Maurice, but was severely wounded and compelled to retire from the field. In 1601-02 he defended Ostend with signal success though against great odds, and in 1606 returned to England, where he was appointed governor of Portsmouth and of the island of Portsea.

VERENDRYE NATIONAL MONUMENT. A government reservation just south of Sanish on the Missouri River in Mountrail county, west central North Dakota. Its area is about one square mile and it includes Crow-high Mountain, a prominent butte from which observations were made by Verendrye, the French explorer of the Northwest and the first white man known to have entered what is now North Dakota.

VERESTCHAGIN, vĕ-rĕsh-chā'gĕn, **Vasilii**, Russian painter: b. province of Novgorod, 25 Oct. 1842; d. on board the battleship *Petrovsk*, 13 April 1904. He was educated at the naval school in Saint Petersburg, but devoting himself to painting, he entered the Saint Petersburg Academy. In 1861 he traveled in Germany, France and Spain, and in 1864 he entered the École des Beaux Arts at Paris, where Gérôme was his master. He joined the Caucasian expedition under General Kaufmann in 1867, and in 1869 went to Siberia. In 1874 he went to India with the Prince of Wales, and afterward settled in Paris. He took part in the Russo-Turkish War, and was wounded at Plevna. Subsequently he visited all the chief cities of Europe, as well as the United States, exhibiting his pictures. They are of immense size, extremely realistic, and treat chiefly of the horrors of war. Among his war pictures are 'An Unexpected Attack'; 'Before the Victory'; 'After Defeat'; 'Assault on Plevna'; 'After the Assault'; 'Apotheosis of War'; 'Wounded Returning'; 'Our Prisoners'; 'All Quiet at Shipka'; 'The Route to Plevna'; 'The Retreat from Moscow'; 'The Forgotten Soldier':