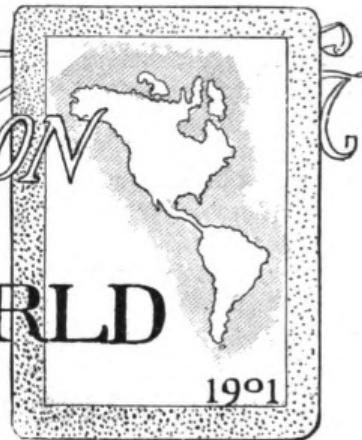


The EVOLUTION of a NEW WORLD



BY BECKLES WILLSON.



SO much has been said and written lately on the subject of "American expansion" that it is a relief to turn to an altogether different and fanciful process of expansion which took place some centuries ago without attracting then, or attracting yet, all the attention it deserves.

When an enterprising mediæval philosopher beheld an elephant or a comet for the first time, we naturally infer that his nerves were shaken a little, so that when he came to describe his phenomenon to a race of people unfamiliar with elephants or comets the idea was not conveyed in so faithful a manner as would satisfy the requirements of a modern zoologist or astronomer. And this, we imagine, must have been the case with most of the ancient cosmographers who actually saw the New World and straightway set down their impressions upon parchment.

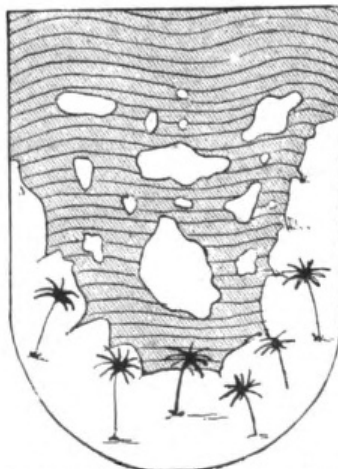
If this hypothesis be not correct, then the volcanic and glacial ages are, so far as the Western hemisphere is concerned, much nearer our time than science would have us believe. North America and its fellow-continent, South America, were by no means yesterday what they now appear to sailors, travellers, geographers, and even stay-at-home folk, who are familiar with their configuration as it appears in their favourite atlas to-day.

No; the fact seems to be (always assuming that these learned European cartographers were correct in their representations) the New World only began to settle down peace-

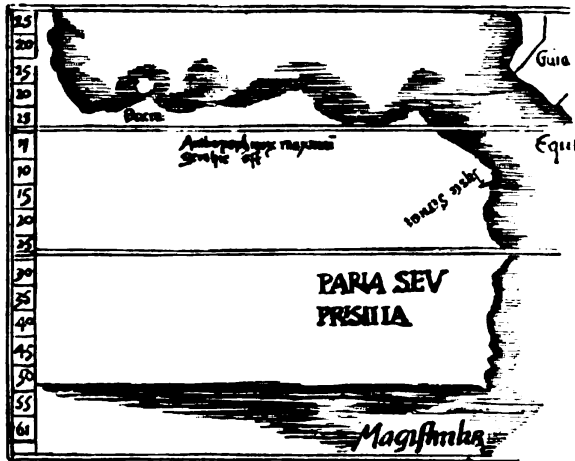
fully to its present familiar outlines about the time that its people began to be stirred up politically, and the long process of change—sometimes violent (as the reader may see by a glance at the accompanying maps), and always peculiar—only came to an end about the period of the Declaration of Independence.

On the other hand, the reader must leave to himself a loophole of escape from the logical consequence of these deductions: there is always the possibility that these ancient draughtsmen were careless handlers of the truth, and the possessors of very vivid imaginations. It may be that the New World has never altered a jot in its coastlines from Columbus's day to our own; and that if we really wish on the present occasion to attempt to describe its geographical evolution—apart from the slight consequences of marine erosion—we must go back several millions of years to the Eozoic and Palæozoic ages.

One thing is certain—it must have been very puzzling to a sixteenth century schoolboy to be asked by his master to draw a map of the wonderful New World the Genoan had recently discovered. He could never be quite sure of that world. He never knew where to have it. Was it round or oblong? Was it an island? Was it a peninsula stretching out from India? How big was it? As large as England or twice the size of Africa? If he pinned his young faith to the great geographers of the time in which he lived and studied he might go to bed firmly convinced that the



COLUMBUS'S COAT-OF-ARMS, CONTAINING THE EARLIEST MAP OF AMERICA, 1493.



GREGOR RUYSCH'S MAP, ABOUT 1515.

Terra Nova was a square and wake up to find it of the elongated dimensions of an eel. There was no depending upon that quarter of the globe; it was changeable, capricious, and volatile. And if it had taken it into its head (or headlands) to scuttle off altogether, that school urchin of Erasmus's time would probably not have been greatly surprised, and perhaps not a little relieved.

In point of fact, his bewilderment was shared by his elders. It is recorded of Henry VIII. that he could make nothing of the *mappemundes* which his courtiers exhibited to him, and even went so far upon one occasion as seriously to doubt whether there was any New World at all, so contradictory were the accounts of its geographical existence. The earliest map possessed by Europe of those lands is contained in the very last place one would expect to find such a record—in the coat-of-arms of Columbus, reproduced on the preceding page. The discovery was made in the present century by the great Humboldt, for the significance of the quartering in the shield drawn by Columbus's own hand appears to have been missed for generations. The Admiral's own map, from which he probably copied that in the coat-of-arms, is supposed to have perished.

From 1493 to 1509 we have several maps exhibiting meagre coast-lines of the so-called "America"; but the lines are as incomplete a portrait as the draw-

ing of the back of a man's head would be of the man himself. The oldest of these now in existence is the celebrated map of the pilot Juan de la Cosa, drawn in 1500. After a career of vicissitudes and neglect, this interesting record was purchased by a geographer named Walckenaer from an ignorant dealer in second-hand articles for a mere trifle. On Walckenaer's death, in 1852, it was sold at public auction in Paris to the Spanish Government, and is now in the Naval Museum at Madrid. After this came the Cantina map, in 1502, and the map of Peter the Martyr several years later.

But these unilateral outlines only whetted the public curiosity. People in Europe began to demand of the map-makers what the shape was of the new continent which had been discovered. For a few years the map-makers resisted this demand; but at length one, more fertile or less scrupulous than the rest, set his wits to work and evolved, as the German of fable evolved his camel, a likeness of *Novus Mundus*.

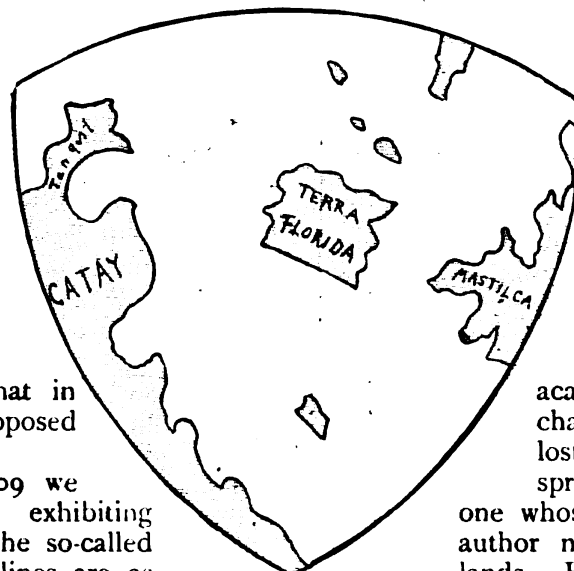
His name was Gregor Ruysch, and one can easily picture the sensation which his presentation must have created. It reminds one of the tale of the Duke of Newcastle in George II.'s day, who was informed that Cape Breton was an island.

"Cape Breton an island!" exclaimed the Minister. "Dear me, how surprising! I must run and tell His Majesty that Cape Breton is an island."

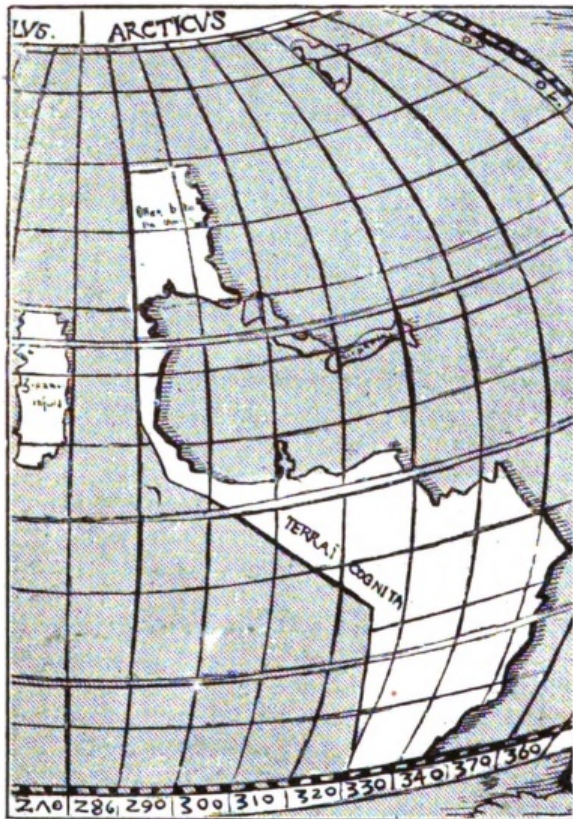
In the same way his courtiers must have gone running to tell Henry VIII. that America was oblong with a southern surface as smooth as a plane. But even Ruysch, or Reisch, hesitated about the western

boundaries of his New World. He probably felt that there should be a limit to his audacity or his genius. He had shown Europe the north, east, and south; the west he ingeniously abutted upon a scale, and left another to set it forth to the expectant Courts, camps, and

academies of Europe. The chance was not one to be lost; the cartographer, who sprang into the breach, was one whose fame as painter and author now extends over many lands. But it cannot conscientiously be said by the great



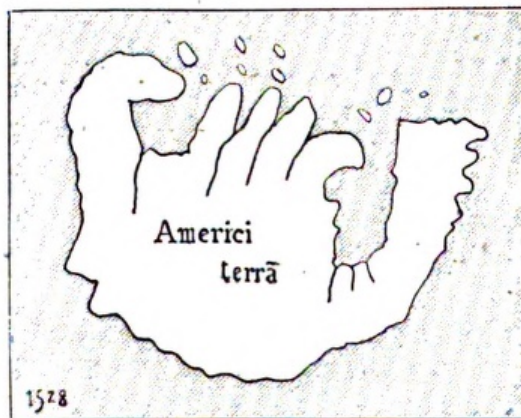
LEONARDO DA VINCI'S MAP, ABOUT 1515.



STOBNICZA'S MAP, EARLY 16TH CENTURY.

Leonardo Da Vinci's admirers that he surpassed himself in his representation either of the northern or southern half of the hemisphere. As will be seen by the subjoined map, that of the former lacks force and fancy: it has neither grace nor opulence of contour. It doubtless came in for severe criticism, as the work of a poet and scholar, and Da Vinci probably made an effort to retrieve himself by his map of South America; but whether he succeeded ever in firmly re-establishing himself in the confidence of the purchasers of his map of North America may well be doubted.

Of the other map-makers, few of them



COPPI'S MAP, PUBLISHED 1528.

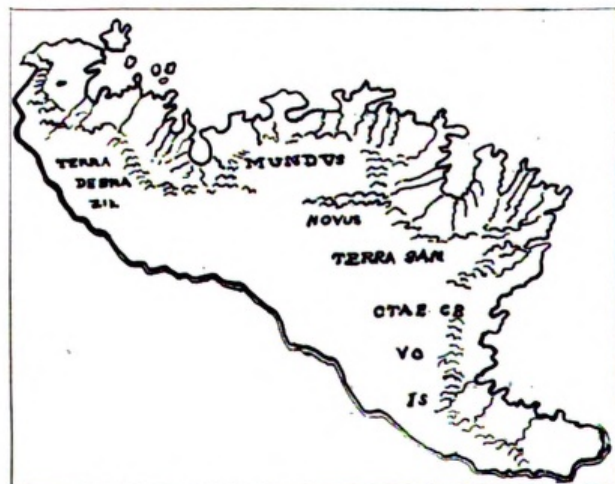
seem to have entertained any doubt whatever that the Ganges and the great rivers of Cathay or China were close at hand to the westward of the island which bears Amerigo Vespucci's name. The earliest cartographer to attempt



LEONARDO DA VINCI'S SECOND MAP, ABOUT 1520.

to represent on a plane a sphere truncated at the poles is that of Stobnicza, in 1512. In the accompanying illustration the island drawn to the westward of the Isthmus of Panama is Zipangu, or Japan.

It was, perhaps, a natural reaction against Da Vinci's conception of the New World that caused Pierro Coppi, a Venetian, to design what is to-day one of the most fascinating of the cartographical wonders of the



THE LENOX GLOBE, EARLY 16TH CENTURY.

New World. It bears some resemblance to an elephant struggling on its back, with trunk and four legs in air. It is surmounted by a number of islands, Coppi being among the last of the school which believed North America to be an archipelago. The date of this map is 1528, because it was not



SCHÖNER'S SECOND MAP, 1520.

until that year that it was published, but it was probably drawn ten or a dozen years before.

Mariners and explorers now continued to arrive at every capital in Europe, and each, being closeted with the learned, contributed something to the general knowledge of the other half of the globe. Some lucky guesses were made from time to time, but many of the wisest and luckiest mappists proved backsliders. They did not stick to their theories. Each nation, Spanish, Portuguese, French, Italian, German, English, and Dutch, had its own rival cartographers, and each tried to be loyal to its own private conception of the New World. Schöner of Nuremberg, whose globe exists to-day in the museum at Weimar, drew a map which enjoyed great vogue in 1515, considerably improving upon Stobnicza's bald west coasts. Another globe, known as the Lenox globe, instantly competed with Schöner's idea, and cast a doubt upon the



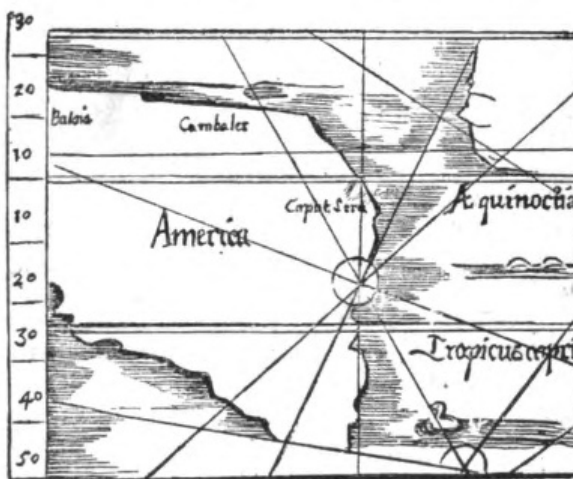
APIANUS'S MAP, 1520. Vol. xxii.—41.

existence of any northern continent whatever. Schöner responded by setting forth another map, correcting "from the latest advices" the outlines of North America, but which, unfortunately, bears about as much resemblance to the actual configuration of that section of the world's surface as a banana does to a bicycle.

In 1520 a Swiss

named Bienewitz, otherwise known as Apianus, believed he had settled for ever the question of the shape of the Western world. This was for a long time considered the earliest engraved map to show the name of "America," as appears on the annexed facsimile. This shows the continent suffering from an almost painful attenuation, and presenting a striking contrast to the form given it a few years before by most of the map-makers of Europe, especially

Da Vinci and Coppi. But Europe was not satisfied with the result; it sought still for an impossible ideal. Knowledge percolated slowly, often one country was far in advance of another in respect of cartographical infor-



LAURENTIUS FRISIUS'S MAP, 1522.

mation; but it is not astonishing that it soon became a matter of national honour to contend that its own current maps were the most accurate. As an example of a map much in vogue in England at this period we may cite that prepared by Laurentius Frisius for the standard edition of Ptolemy, published in 1522. It is distinguished by great reticence, as though en-



BOULINGER'S MAP, EARLY 16TH CENTURY.

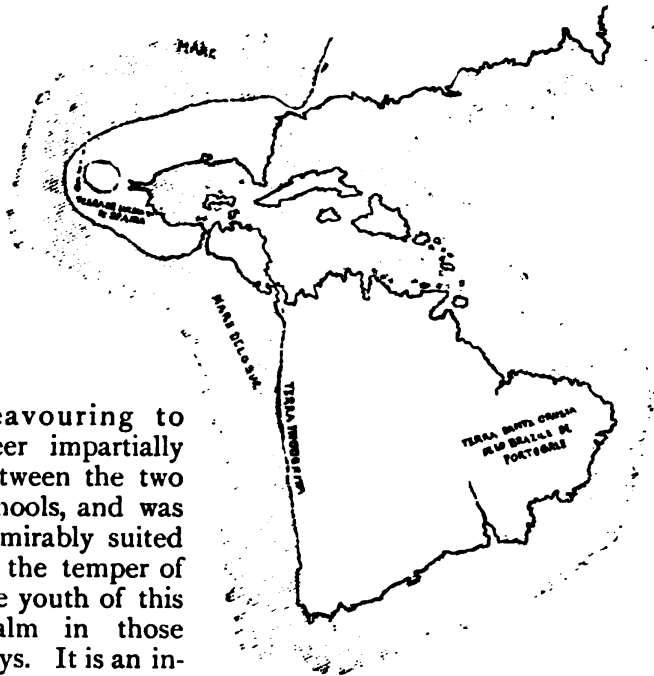
deavouring to steer impartially between the two schools, and was admirably suited to the temper of the youth of this realm in those days. It is an in-offensive, if somewhat non-committal,

design, and left a great deal to the imagination. It is not like the one which puzzled Shakespeare in his day, "the new map of the augmentation of the Indies," which, we are told in "Twelfth Night," was scarred and lined, as the countenance of Malvolio.

A map of a totally different sort, though contemporary, is that probably studied by the French youth of that time. It was drawn by Louis Boulenger, and only a single copy is now known to exist. It was engraved in a catalogue of Tross, the Paris bookseller, in 1881, and consists of twelve gores intended for a globe.

In shape the map drawn in Portugal by Maillo is very peculiar, although it cannot be denied that the long, narrow peninsula, terminating in Cape Horn, is somewhat picturesque.

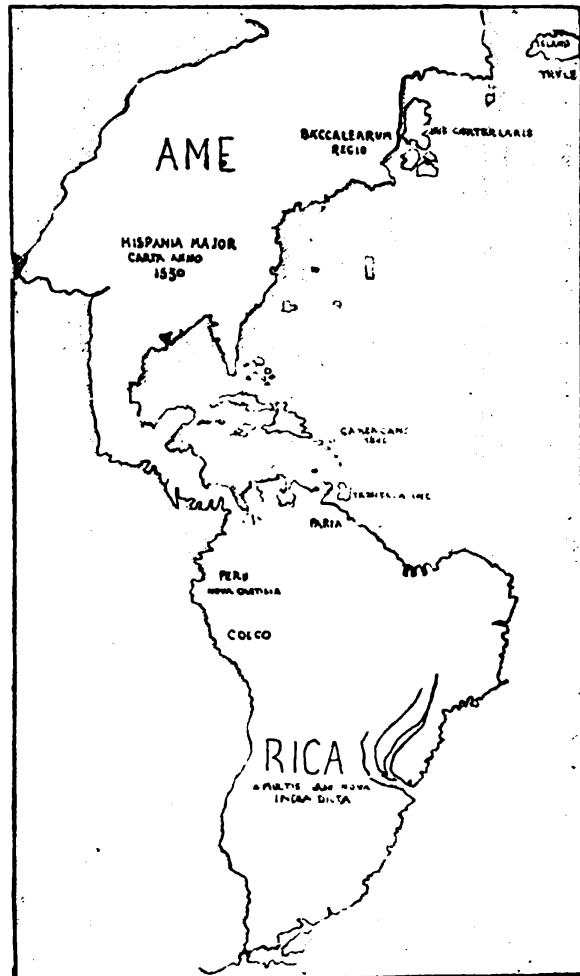
But the geographical drama was fast progressing towards a dénouement. A great stride forward was made by the celebrated Mercator, who in 1541 produced a large map, which he solemnly affirmed was a correct and exact representation of the New World, which had given the geographers and learned men of Europe so much trouble for fifty years. Of course, Mercator was laughed to scorn, and many excellent persons in England and France would have nothing to do with him or his map or his spherical representation of the earth into a plane on the



MAILLO'S MAP, 1527.

cylindrical principle, since known to fame as Mercator's Projection. But other cartographers borrowed Mercator's idea of the New World's outline; and so, little by little, the mystery became revealed.

The western coast-line of the northern continent, however, was long destined to remain shadowy, especially in the higher latitudes. Buriel, in his edition of Venegas's "California," in 1757, confesses that nothing was known. But with Vancouver's voyage in 1788 and his subsequent map the last remaining doubts were removed concerning the configuration of North America. In the little churchyard at Petersham, in Surrey, his grave unkept and neglected, lie the remains of the man who completed the cartographical evolution of a New World.



MERCATOR'S MAP, 1541, THE FIRST FAIRLY ACCURATE MAP OF AMERICA.