

the air-pump in 1650, and of other important scientific instruments in the following years, if they had no direct reference to America, were nevertheless links in the great chain of inventions, of which the astrolabes and ships-pumps constructed by the Spaniards and Portuguese were the first.

One of our German historians of America has said with truth: "The most important result of the ocean voyages and discoveries is not the addition to our knowledge of geography *per se*, but the opening in all directions of new channels of reciprocal communication in the interest of all mankind." All the great thinkers and philosophers of modern times—Bacon, Grotius, Leibnitz, Newton, Montesquieu, Locke, and Kant—would probably never have appeared without Columbus, and but for him, in every case, they would have been very different from what they were. It may safely be said that before Columbus, men like them, imbued with the free spirit of investigation, were very rare, but that after him they shone forth in greater numbers, like the stars of the southern heavens.

Even with poetry, with the bloom of our literatures, and with the history of our national languages, the age of discovery and its powerful impulses are more intimately connected than is generally acknowledged.

Like as the voyages of the Argonautæ, and the ex-