M. Vitruvius Pollio has been described as "one of the most influential authors of the whole of classical antiquity" by an eminent historian of science, George Sarton. Obviously from this description we ought to expect a man to rank with Homer or Plato, Cicero or Vergil. Yet most people have scarcely even heard of Vitruvius, far less know much about him or his work. Who was he? What did he write and why has he been called influential?

Vitruvius' own life is not well-documented. In fact, very little is known about him beyond what he himself tells us here and there in his ten books titled On Architecture. We may guess that he was perhaps a Roman eques, whose parents took care that he should be taught a profession, architecture, "of a sort which cannot be brought to perfection without learning and a liberal education in all branches of instruction". Thanks to his parents' care and his teachers' instruction, he progressed in a career which brought him no great celebrity, but plenty of success and personal satisfaction, if not a great deal of money. He was known to Julius Caesar as an engineer or architect, served in the civil wars of the 30's B.C. as a military engineer, and was rewarded for "the supply and repair of ballistae, scorpiones and other artillery" by Augustus himself. Augustus' sister, Octavia, also supported his career; her support, it seems, ensured further favours and recognition from Augustus in the early years of his principate.

On Architecture was dedicated and presented to Augustus sometime between 31 and 27 B.C. since Augustus is addressed as Imperator Caesar, not Augustus, a title which he used only after 27 B.C., yet the civil wars were clearly conclusively ended by the time of the presentation of On Architecture. Perhaps this was a work which Vitruvius had been planning for a long time, for he describes himself as old (and consequently not much to look at!) and not very strong because of his illhealth. He also says he was a small man and that he was unwilling to compete for commissions and projects with the uneducated or the unscrupulous, preferring to seek respect, at least from posterity, for his knowledge and his writings. It is quite clear from his book that he had a great deal of knowledge, both scholarly and practical. He refers to many Greek (and a few Latin) authors, architects and philosopherscientists, while his practical talents and experience are well documented in Book V, which contains a detailed description of a basilica, or law-court and business building which he designed and had erected at Fanum Fortunae or Colonia Julia Fanestris on the Adriatic coast about 30 km south of Ariminum (Rimini). And that's it. We don't know any more about our Roman architect whose work had such an influence on later times.

Before looking at that influence, we'd better see what sort of topics Vitruvius decided to discuss in disclosing "all the principles of the art". In Book I, Vitruvius begins his work with the education of the architect, who must be both "naturally gifted, and amenable to instruction...Let him be educated, skillful with the pencil, instructed in geometry, know much history, have followed the philosophers with attention, understood music, have some knowledge of medicine, know the opinions of jurists, and be acquainted with astronomy and the

theory of the heavens"! He then goes on to discuss fundamental principles of architecture and city-planning. Book II describes different building materials, and contains an interesting digression on early man and the first houses. Books III, IV and V discuss the design of temples and other public buildings, while Books VI and VII explain better how to select a site for, construct and decorate a house. Books VIII and IX discuss water supplies, stars, weather and clocks, while Book X particularly appeals to historians of technology. It contains quite a number of machines and engines, ranging from water wheels to cranes, screw pumps to catapults, odometers to water organs.

It is not, however, the machinery, or the details of interior decorating techniques or even his rules for city planning that made Vitruvius so influential a man. His book was first published in modern times in Rome in 1487; a better edition, with illustrations, came out in Venice in 1511, prepared by Fra Giocondo, a Dominican antiquarian and scholar who also edited Pliny's Letters and Caesar's Commentaries, as well as rediscovering the lost tenth book of Pliny's work, the correspondence with Trajan. Within a very short time, Vitruvius was famous, much as he himself had hoped fifteen hundred years before, because of his writings on architecture. An academy, or scholarly institute, was founded to study his theories: a leading Renaissance Italian scholar included him among the twelve greatest thinkers of all time, and Andrea Palladio used his handbook and his principles as the foundation of his own treatise, Four Books on Architecture (Venice, 1570). Palladio's work altered the entire face of Europe, for his revival of

(From Sarton's A History of Science, Vol. 2 )

the classical design for temples and public buildings immediately edged to one side the Gothic designs in use up to that time. Palladian or Neo-Classical architecture was not to be seriously challenged or superseded until the twentieth century.

So if you know what Toronto's Union Station, or the White House in Washington, or the Arc de Triomphe in Paris, or St. Paul's Cathedral in London look like (or a thousand and one lesser 'classical' buildings), then you know something of why Sarton could say that Vitruvius is one of the most influential authors of all who have survived from the classical world. If you want to read his ten Books, look for a translation by M.H.Morgan (illustrated) republished by Dover in 1960 as Vitruvius: the Ten Books on Architecture, from which all quotations in this article have been taken.

(Title page from the 1511 edition of Vitruvius; from Sarton's A History of Science, Vol. 2)