Steel construction and the rapid development of engineering •practice has affected not only the erection of tall buildings, but has also produced improvement in the erection of factory and workshop premises. Modern work­shops consist of wider buildings of greater height with plenty of roof-light, efficient ventilation, and artificial heating, and as the heavy loads can be carried by the reinforcing material, heavy walls become unnecessary. Gradually, therefore, the modern steel-framed factory has been evolved, capable of supporting all the loads, the outer walls being required only for protection against weather. Light steel roof trusses have replaced the timber trusses, and with the columns form a rigid framework to resist the structural and wind loads as well as those from the cranes and shafting.

In Germany skeleton steel-framed factory buildings may be erected with half brick (12 cm.), with a restriction that when such buildings are abutting or are in the immediate neighbour­hood, *i.e.* within 20 ft. of a neighbouring building, the outside walls on the sides affected shall be full brick (25 cm.).

The permissible height to which a building may be erected on the continent of Europe depends largely on the breadth of the road on which such buildings are situated. As a rule it is not permissible to erect a building wider than the road, measured from building line to building line.

In American practice the use of steel in buildings of ten or more storeys, or in manufacturing plant where the floor loads are heavy and frequently “ live ” in the sense of causing vibration, has led to more careful specifications as to the quality of mate­rials and character of workmanship, and it is the custom of the leading architects to have the structural frame inspected and tested during manufacture at the foundries, rolling-mills and shops by a firm of engineers making a speciality of such inspections.

The illustrations (see Plates I. and II.) will give a good idea of the general construction as now carried out in England and America.

Authorities.—See Birkmore, *The Planning and Construction of High Office Buildings*; Farnworth, *Constructional Steel Work;* J. K. Frietag, *Architectural Engineering;* Kitchin, *Steel Mill Build­ings; Carnegie Steel Company's Pocket Companion; Pencoyd Iron Works Handbook.* (J∙ Bτ.)

**STEELE, ANNE** (1717-1778), English hymn writer, was born at Broughton, Hampshire, in 1717. The drowning of her betrothed a few hours before the time fixed for her marriage deeply affected an otherwise quiet life, and her hymns rather emphasize the less optimistic phases of Christian experience. In 1760 she published *Poems on Subjects Chiefly Devotional* under the name u Theodosia,” and her complete works (144 hymns, 34 metrical psalms and 50 moral poems) appeared in one volume in London (1863). She was a Baptist, and her hymns are much used by members of that communion, though some of them, *e.g.* “ Father of mercies, in Thy word,” have found their way into the collections of other Churches. She has been called the Frances Ridley Havergal of the 18th century.

**STEELE, SIR RICHARD** (1672-1729), English man of letters in the reign of Queen Anne, is inseparably associated in the history of literature with his personal friend Addison. He cannot be said to have lost in reputation by the partnership, because he was inferior to Addison in purely literary gift, and it is Addison’s literary genius that has floated their joint work above merely journalistic celebrity; but the advantage was not all on Steele’s side, inasmuch as his more brilliant coadjutor has usurped not a little of the merit rightly due to him. Steele’s often-quoted generous acknowledgment of Addison’s services in the *Taller* has proved true in a somewhat different sense from that intended by the writer: "I fared like a distressed prince who calls in a powerful neighbour to his aid; I was undone by my auxiliary; when I had once called him in I could not subsist without dependence on him.” The truth is that in this happy alliance the one was the complement of the other; and the balance of mutual advantage was much more nearly even than Steele claimed or posterity has generally allowed.

The famous literary pair were born in the same year. Steele, the senior by less than two months, was baptized on the 12th of March 1672 in Dublin. His father, also Richard Steele, was an attorney. He died before his son had reached his sixth year, but the boy found a protector in his maternal uncle, Henry Gascoigne, secretary and confidential agent to two successive dukes of Ormond. Through his influence he was nominated to the Charterhouse in 1684, and there first met with Addison. Five years afterwards he proceeded to Christ Church, Oxford, and was a postmaster at Merton when Addison was a demy at Magdalen. Their schoolboy friendship was continued at the university, and probably helped to give a more serious turn to Steele’s mind than his natural temperament would have taken under different companionship. Addison’s father also took an interest in the warm-hearted young Irishman; but their combined influence did not steady him sufficiently to keep his impulses within the lines of a regular career; without waiting for a degree he volunteered into the army, and served for some time as a cadet “ under the command of the unfortunate duke of Ormond ” (Le. the first duke’s grandson, who was attainted in 1715). This escapade was made without his uncle’s consent, and cost him, according to his own account, "the succession to a very good estate in the county of Wexford in Ireland.” Still, he did not lack advancement in the profession he had chosen. A poem on the funeral of Queen Mary (1695), dedicated to Lord Cutts, colonel of the Coldstream Guards, brought him under the notice of that nobleman, who took the gentleman trooper into his household as a secretary, made him an officer in his own regiment, and ultimately procured for him a captaincy in Lord Lucas’s regiment of foot. His name was noted for promotion by King William, but the king’s death took place before anything had been done for Captain Steele. A duel which he fought with Captain Kelly in Hyde Park in 1700, and in which he wounded his antagonist dangerously, inspired him with the dislike of the practice that he showed to the end of his life.

Steele probably owed the king’s favour to a timely reference to his majesty in *The Christian Hero,* his first prose treatise, published in April 1701. The “reformation of manners” was a cherished purpose with King William and his consort, which they tried to effect by proclamation and act of parliament; and a sensible well-written treatise, deploring the irregularity of the military character, and seeking to prove by examples— the king himself among the number—"that no principles but those of religion are sufficient to make a great man,” was sure of attention. Steele complained that the reception of *The Christian Hero* by his comrades was not so respectful; they persisted in trying him by his own standard, and would not pass “ the least levity in his words and actions ” without protest. His uneasiness under the ridicule of his irreverent comrades had a curious result: it moved him to write a comedy. “It was now incumbent upon him,” he says “ to enliven his char­acter, for which reason he writ the comedy called *The Funeral.”* Although, however, it was Steele’s express purpose to free his character from the reproach of solemn dullness, and prove that he could write as smartly as another, he showed greater respect for decency than had for some time been the fashion on the stage. The purpose, afterwards more fully effected in his famous periodicals, of reconciling wit, good humour and good breeding with virtuous conduct was already deliberately in Steele’s mind when he wrote his first comedy. It was produced and published in 1701, and received on the stage with favour. In his next comedy, *The Lying Lover; or, the Ladies’ Friendship,* based on Corneille’s *Menteur,* produced two years afterwards, in December 1703, Steele’s moral purpose was directly avowed, and the play, according to his own statement, was “ damned for its piety.” *The Tender Husband,* an imitation of Molière’s *Sicilien,* produced eighteen months later (in April 1705), though not less pure in tone, was more successful; in this play he gave unmistakable evidence of his happy genius for conceiving and embodying humorous types of character, putting on the stage the parents or grandparents of Squire Western, Tony Lumpkin and Lydia Languish. It was seventeen years before Steele