separated from the artificial fluoride of calcium by lixiviation, and the solution so obtained is decomposed by treatment with carbonic acid, which produces a precipitate of alumina available for alum- making, &c., leaving a solution of carbonate of soda. About 8000 tons of cryolite are annually treated in Pennsylvania and in Denmark.

*Statistics of Soda Trade.—*No means exist for obtaining an accurate statement of the extent of the soda trade ; and such estimates as are published can only be accepted as approximations based on knowledge of the productive capacity of existing works and the general course of trade. Speaking at the Society of Chemi­cal Industry (London section) in January 1883, the late Walter Weldon gave the following estimate (in tons) of the soda produc­tion of the world at that date :—

|  |  |  |  |
| --- | --- | --- | --- |
|  | Le Blanc Soda. | Ammonia  Soda. | Total. |
| Great Britain | 380,000 | 52 000 | 432,000 |
| France | 70,000 | 57,125 | 127,125 |
| Germany | 56(500 | 44,000 | 100,500 |
| Austria | 39,000 | 1,000 | 40,000 |
| Belgium | 8 000 | 8,000 |
| United States | .. | 1,100 | 1,100 |
|  | 545,500 | 163,225 | 708,725 |

In these figures the whole of the products made—soda ash crystals, bicarbonate, caustic soda, &c.—are calculated in terms of pure car­bonate, NaCO3. Assuming the fairness of the calculation, we are warranted in stating the present (1887) production of alkali, as pure carbonate, to be not less than three quarters of a million of tons annually. (W. D.—J. PA.)

SODOM and GOMORRAH. See Dead Sea, vol. vii. pp. 1-3 ; comp. Phœnicia, vol. xviii. p. 803, and Lot.

SODOMA, Il, or, more properly, Sodona (*c*. 1479- 1549), Italian painter. Giannantonio Bazzi (who until recent years was erroneously named Razzi) appears to have borne also the name of “ Sodona ” as a family name ; it is signed upon some of his pictures. While “Bazzi” was corrupted into “ Razzi,” “Sodona” was corrupted into “ Sodoma ” ; and Vasari, followed by other writers on art, accounts for the latter name by giving various and explicit details which we leave undiscussed, for, if the painter did not really pass by the appellation of “ Sodoma,” we may fairly infer that explanations which would have been ger­mane to that appellation are not germane to the man himself. Bazzi was born at Vercelli in Piedmont towards 1479, and appears to have been in his native place a scholar of the painter Giovenone. Acquiring thus the strong colouring and other distinctive marks of the Lom­bard school, he was brought to Siena towards the close of the 15th century by some agents of the Spannocchi family; and, as the bulk of his professional life was passed in this Tuscan city, he counts as a member of the Sienese school, although not strictly affined to it in point of style. He does not seem to have been a steady or laborious student in Siena, apart from some attention which he bestowed upon the sculptures of Jacopo della Quercia. Along with Pinturicchio, he was one of the first to establish there the matured style of the *Cinquecento.* His earliest works of repute are seventeen frescos in the Benedictine monastery of Monte Oliveto, on the road from Siena to Rome, illus­trating the life of St Benedict, in continuation of the series which Luca Signorelli had begun in 1498; Bazzi completed the set in 1502. Hence he was invited to Rome by the celebrated Sienese merchant Agostino Chigi, and was em­ployed by Pope Julius II. in the Camera della Segnatura in the Vatican. He executed two great compositions and various ornaments and grotesques. The latter are still extant; but the larger works did not satisfy the pope, who engaged Raphael to substitute his Justice, Poetry, and Theology. In the Chigi palace (now Farnesina) Sodona painted some subjects from the life of Alexander the Great ; Alexander in the Tent of Darius and the Nuptials of the Conqueror with Roxana are more particu­larly noticed. When Leo X. was made pope (1513) Bazzi presented him with a picture of the Death of Lucretia (or of Cleopatra, according to some accounts) ; Leo gave him

a large sum of money in recompense and created him a cavaliere. Bazzi afterwards returned to Siena, and at a later date went in quest of work to Pisa, Volterra, and Lucca. From Lucca he returned to Siena, not long before his death, which took place on 14th February 1549 (the older narratives say 1554). He had squandered his pro­perty and died in penury in the great hospital of Siena. Bazzi had married in youth a lady of good position, but the spouses disagreed and separated pretty soon afterwards. A daughter of theirs married Bartolommeo Neroni, named also Riccio Sanese or Maestro Riccio, one of Bazzi’s princi­pal pupils.

It is said that Bazzi jeered at the *History of the Painters* written by Vasari, and that Vasari consequently traduced him ; certainly he gives a bad account of Bazzi’s morals and demeanour, and is niggardly towards the merits of his art. According to Vasari, the ordinary name by which Sodona was known was “ Il Mattaccio ” (the Madcap, the Maniac),—this epithet being first bestowed upon him by the monks of Monte Oliveto. He dressed gaudily, like a mountebank ; his house was a perfect Noah’s ark, owing to the strange miscellany of animals which he kept there. He was a cracker of jokes and fond of music, and sang some poems composed by himself on indecorous subjects. In his art Vasari alleges that Bazzi was always negligent,—his early success in Siena, where he painted many portraits, being partly due to want of competition. As he advanced in age he became too lazy to make any cartoons for his frescos, but daubed them straight off upon the wall. Vasari admits, nevertheless, that Bazzi produced at intervals some works of very fine quality, and during his lifetime his reputation stood high.

The general verdict is that Sodona was an able master in ex­pression, motion, and colour. His taste was something like that of Da Vinci, especially in the figures of women, which have grace, sweetness, and uncommon earnestness. He is not eminent for drawing, grouping, or general elegance of form. His easel pictures are rare. His most celebrated works are in Siena. In S. Domenico, in the chapel of St Catherine of Siena, are two frescos painted in 1526, showing Catherine in ecstasy and fainting as she is about to receive the Eucharist from an angel,—a beautiful and pathetic treatment. In the oratory of S. Bernardino, scenes from the history of the Madonna, painted by Bazzi in conjunction with Pacchia and Beccafumi (1536 to 1538)—the Visitation and the Assumption—are noticeable. In S. Francesco are the Deposition from the Cross (1513) and Christ Scourged ; by many critics one or other of these paintings is regarded as Bazzi’s masterpiece. In the choir of the cathedral at Pisa is the Sacrifice of Abraham, and in the gallery of Florence a St Sebastian.

SOEST, an ancient industrial town in Westphalia, Prussia, is situated in a fertile plain *(Sοester Börde),* 27 miles to the east of Dortmund and 34 to the south­east of Münster. Its early importance is borne witness to by its six fine churches, of which the most striking are St Peter’s, St Mary-in-the-Fields, founded in 1314 and restored in 1850-52, and the Roman Catholic cathedral, founded in the 10th century by Bruno, brother of Otho the Great, though the present building was erected in the 12th century. This last, with its very original façade, is one of the noblest ecclesiastical monuments of Germany. Remains of the broad wall (now partly enclosing gardens and fields) and one of the gates still remain ; but the thirty-six strong towers which once defended the town have disappeared and the moats have been converted into promenades. Iron-working, the manufacture of soap, hats, cigars, and bricks and tiles, linen-weaving, tanning, and brewing, together with market-gardening and farming in the neighbourhood, and trade in cattle and grain, are the leading industries. The population in 1880 was 13,985, and in 1885 14,848, of whom about 6000 were Roman Catholics.

Mentioned in documents as early as the 9th century, Soest was one of the largest and most important Hanseatic towns in the Middle Ages, with a population estimated at from 30,000 to 60,000. It was one of the chief emporiums on the early trading route be­tween Westphalia and Lower Saxony. Its code of municipal laws *(Schran ; jus susatense*) dating from 1144 to 1165, was one of the earliest and best, and served as a model even to Lübeck. On the fall of Henry the Lion, duke of Saxony, Soest passed with the rest of Angria to Cologne. In the 15th century the strife between the townsmen and the archbishops broke out in open war, and in 1444