plentiful supply of increasingly effective preventives and curatives. On the other hand it obligates itself to deliver efficiently, courteously, promptly and non-expensively the varied drugs that must always be needed in the battle agaist disease. Other activities will be secondary and supplemental, performed at no sacrifice of the dominating purpose, but simply in order to make achievement more certain.

This is the Spirit and the Service of Pharmacy.

HISTORICAL FRAGMENTS.*

BY EDWARD KREMERS.

NO. 21. A GERMAN DIARIST IN SOUTH AMERICA.

Charles, the oldest son of Archduke Philipp of Austria and of Joanna (the insane daughter of Ferdinand II of Aragon and Isabella of Castile, the protectors of Christopher Columbus), also grandson of the Emperor Maximilian I, reigned as Charles V from 1519 to 1556, Emperor of the Holy Roman Empire of the German Nation, and as Charles I, King of Spain. Of his empire it was said that the sun never set therein.

The year in which Charles V was proclaimed German Emperor, was the year in which Cortez conquered Mexico. Ten years later Pizarro overran Peru. Again ten years later, 1539, De Soto landed at Tampa Bay and in 1541 reached the Mississippi river where somewhat later his remarkable career as explorer of what now constitutes our southern states ended. About the same time Coronado explored corresponding territory west of the Mississippi. In 1534 Don Pedro de Mendoza organized a fleet of 14 vessels and 2500 Spaniards and 150 Germans for an expedition to the Rio della Plata or Parana river. The fleet touched the Canaries and Hesperides, then at Rio de Janeiro in Brazil and finally at Buenos Aires in Argentina. From here expeditions were sent into the interior.

An account of this expedition of exploration and conquest has come down to us from Ulrich Schmidel of Straubing (Bavaria). It is a matter of fact statement of almost twenty years of ups and downs through South American wilderness from the 35th degree of southern latitude northward to the tropic of Capricorn. As to latitude this southern territory corresponds roughly to that traversed north of the equator by De Soto. How any one could survive twenty years of such constant hardship and danger is well nigh incomprehensible, yet Schmidel survived to tell the tale (1) to his old neighbors in Straubing with whom he continued to live upon his return—four times he was elected their burgomaster—until religious differences caused him to move to Regensburg, where he died.

Schmidel's account, like the Hidalgo of Elva's relation of De Soto, goes into minute details as to places visited, the distances traveled, density or scarcity of population, the food of the Indians, and the kind or absolute absence of clothing. He also refers occasionally to diseases and relates that they stopped to allow the

^{*} Section on Historical Pharmacy, A. PH. A.

wounded to recover. But there is not a single reference to a drug or remedy whether for internal or external use. In this respect Schmidel's account, like that of his northern contemporary just referred to, is a disappointment to the student of pharmaceutical history. There is, however, one aspect that is of interest.

The Levant trade, so far as central and northern Europe was concerned, was plied largely by Venice and Genoa. The principal customer of Venice beyond the Alps was Germany. The Hanseatic cities, Nuernberg (2) and Augsburg (2), in southern Germany distributed the goods, spices and aromatics, to Hanseatic merchants in Antwerp, Bremen, Hamburg, Luebeck and Danzig. From these cities on the North and Baltic seas the goods were carried to England, the Scandinavian countries and the Baltic provinces. Of such importance were the Hanseatic agents in London that the principal coin, the pound sterling, derived its name from them, known in London as the Easterlings.

These city states were not only strong enough to have their own republican form of government within the Empire and to wage war, if need be, against the Emperor; their citizens were sufficiently rich to loan large sums of money to the Emperor. Thus legend will have it that the Fuggers (3) of Augsburg and the Welsers (4) of Augsburg and Nuernberg loaned Charles V twelve tons of gold which he naturally did not pay back. In its stead he gave these German merchant princes of the sixteenth century a concession in Venezuela. A later Spanish king, who like Pharaoh of old had forgotten Joseph, deprived the heirs of the original owners of their properties in South America.

With the downfall of the Levant trade due to Mohammedan interference and the consequent development of the water routes to both the West and the East Indies, the Hanseatic merchants were naturally anxious to secure a footing in the India trade that developed in Seville, where resided the Council of the Two Indies. General history tells us about all this, but it does not afford the pharmaceutical historian the satisfaction of tangible events and names. A few such are gleaned from Schmidel's "Wahrhaftige Historie."

As already pointed out, Schmidel in his first chapter relates that in addition to 2500 Spaniards, there were 150 Germans ("Hochteutsche, Niederlaender und Sachsen") who gathered in Cadiz to take part in the expedition. More than that, we are informed that one of the vessels belonged to Herr Sebastian Reudhart and Herr Jacob Welser of Nuernberg who were sending their factor Heinrich Peime with a body of merchants to Rio della Plata. Of their dealings we are not advised.

The letter that calls the explorer back to his home is delivered to him through the agency of Cristoph Reiser, who was the Fugger factor in Seville, Spain. Shortly thereafter he learns that a ship had arrived at a Brazilian port which belonged to a Herr Johann Huelsen, a merchant of Lisbon, Portugal, who was factor to Erasmus Schetz of Antwerp. Somewhat later he arrives at S. Vincente in Brazil where he is well received by Peter Roessel who is the local factor of Erasmus Schetz. The vessel had meanwhile been laden with sugar, Brazil wood and cotton and on it our explorer returns to Europe. Of the place of embarkation he notes that all "Christians" men, women and children, were engaged in making sugar.

The Levant-Venice-Hanseatic trade consisted to no small extent of spices and aromatics which were important items of the *materia pharmaceutica*. Sugar was also an important ingredient of syrups, electuaries, etc. Though the information is

exceedingly meagre, Schmidel's account gives us a direct insight into the ramifications of the Hanseatic merchants via Spain into the new world and informs us that sugar and a dye wood constituted two of the three items of the cargo of the Hanseatic vessel with which he returned.

- (1) Wahrhaftige Historie einer wunderbaren Schiffahrt, welche Ulrich Schmidel von Straubing von 1534 bis 1554 in America oder Neuewelt bei Brasilia oder Rio della Plata getan. Was er in diesen neunzehn Jahren ausgestanden und was fuer seltsame wunderbare Laender und Leut er gesehen. New edition by Engelbert Hegaur, Muenchen. Im Verlag von Albert Langen.
- (2) These two "Reichsstaedte" produced the first pharmacopæias north of the Alps: Cordus' Dispensatory appeared in 1546 and Occo's in 1564. Cologne one of the principal commercial centers on the Rhine followed in 1565.
- (3) In 1370 the Fuggers became citizens of Augsburg. All of the branches of the family appear to have developed men of distinction. During the reign of Charles V, they played an important rôle not only in Augsburg, but throughout the empire and Spain. Pharmaceutically, it is of interest to note that the *Pharmacopoea Augustana* of 1597, edited by Occo, was dedicated to Octavianus Fugger II and Querinus Reblinger II. The editor of the earlier 17th century editions of the *Augustana*, Raimundus Minderer, of Spiritus Mindereri fame, dedicated several of his treatises to members of the Fugger family. This is true of his *Aloedarium*, also of his *Medicina militaris*. The latter (1619) was dedicated to Captain Otto Heinrich Fugger. (See Husemann's essays on the **Ph. August.**)

According to Schelenz (Geschichte d. Pharmazie, page 429) the Fuggers possessed a monopoly of the trade in tobacco, sarsaparilla, guaiac and mercury in Almeda from 1525 to 1645. From the fact that Count William of Hessia in 1575 ordered not only guaiac and tobacco from Fugger but also a description of the latter, Schelenz assumes that this world firm issued reports on the newer materia medica (Ibid., page 430).

A number of years ago, the *Daheim* reproduced a painting by P. Messerschmidt entitled "Aus der Zeit der Fugger," which may well serve as an aid to the imagination to picture commercial scenes of the 16th century.

(4) Originally an Augsburg family, a Nuernberg family branched off in the 15th century and an Austrian family in the 16th century. Bartholomaeus, who, with Fugger, loaned Charles V large sums of money (it is said 12 tons of gold) was made an empirical councilor. In 1527 (i. e., seven years earlier than the expedition joined by Schmidel) he equipped three vessels in Spain that sailed to America under the command of Ambrosius Dalfinger of Urlen who took possession of the province of Caracas, which the Emperor had given him in trust. However, as early as 1546 the Spanish colonial authorities took back the possessions and a young Welser was executed. About the same time the Welsers and other Nuernberg merchants sent a vessel to the Fast Indies to establish new commercial connections.

The most illustrious, however, of the Welsers is a niece of Bartholomacus, viz. Philippine Welser. While in castle Brozesnic in Bohemia with her relatives, Archduke Ferdinand, son of the Roman Emperor, met her. They were married in 1557 and became reconciled with the irate king in 1559. One of the sons became a cardinal. The other son entered military service and was elevated to the rank of a count. Philippine died April 24, 1580 in Tirol. Her romantic story has been dramatized by Redwitz.

Das Rezeptbuch der Philippine Welser is the title of an article by O. F. Zeckert which appeared in the Pharm. Monatshefte for 1924. No. 1.

The Daheim for 1910 reproduces a portrait of Philippine Welser by Lukas Cranach.

At the time that President Cleveland seemed to want to precipitate a war between England and the United States because of South American boundary disputes, the same weekly published a popular account of this family's exploits in the new world entitled "Venezuela der Welser Land."