

the present federation. Extreme centralization of authority caused the downfall of the order, and was responsible for the organization of the federation. Trade autonomy was thus made the cardinal principle of that organization from its very inception. Of late years, however, the concentration of industry and the gradual obliteration of the lines of demarcation of hitherto distinct trades, brought about by new inventions, have thrown thousands of workmen of various crafts into the same industries. In the resulting confusion friction has become inevitable. As an illustration of that may be mentioned the invention of the type-setting machine, which brought the machinist and the type-setter so closely together as to give rise to the present dispute between the International Typographical Union and the International Association of Machinists over their respective jurisdiction. The disputes between these two organizations and between a number of others, raging now for a number of years, have been treated by the federation conventions rather timidly. The federation hesitates to face the new conditions in a radical manner for fear of losing organizations of certain trades which are threatening with secession in case they should be denied complete autonomy within their particular spheres. But the conflict within the federation is bound to go on and become more bitter until it is settled in accordance with the changed conditions. That the principle of concentration is going to triumph in the end, in spite of the aversion to abandon time-honored traditions, may be seen from the fact that the most important disputes, the one mentioned above and that between the Brewers' and Engineers' unions, were decided in favor of unlimited control of the entire printing and brewing industries by the respective unions representing them.

FENCING. The principal fencing events of 1900 were the intercollegiate championships and the junior team, senior team, and individual championships of the Amateur Fencers' League of America. The seventh annual intercollegiate championships, held at the New York Racquet and Tennis Club on March 31, were captured by Harvard, which won 23 bouts out of the 90 contested; the record of the other teams entered was: United States Naval Academy, 22 bouts; Cornell, 21 bouts; Columbia, 20 bouts, and Yale, 4 bouts. Three men composed a team. A. E. Wieland, of Cornell, won the individual championship, with 11 bouts; L. E. Ware, of Columbia, 10; H. Tamuva, Naval Academy, 9. The junior team championships of the Amateur Fencers' League of America, held at the Fencers' Club, New York, on April 14, were won by Columbia, 22 bouts; second New York Athletic Club and New York Turn Verein, 11 bouts each; fourth, Yale, 10 bouts. The senior team championship, April 21, was won by the Fencers' Club, of New York, 6 bouts; New York A. C., 3 bouts. The individual championship, April 27-28, was played as follows: Foils, won by Fitzhugh Townsend, Fencers' Club, 16 bouts; second, a tie between Charles Tatham, Fencers' Club, W. D. Lyon, New York A. C., and J. P. Parker, Boston A. A., Tatham winning second place in the extra bouts. Duelling swords, won in an extra bout by W. D. Lyon after he had tied at 14 bouts with Charles Tatham; third, Dr. J. H. Claiborne, New York A. C., 13 bouts. Sabres, won by F. L. Slazenger, New York A. C., 19¾ points; second, J. L. Erving, Fencers' Club, 17½ points; third, A. P. Pope, New York A. C., 15¼ points. On April 7, the Boston A. A. team and the Fencers' Club, of New York, met at Boston, the former winning by 5 bouts to 4. On April 21, at New York, the Fencers' Club defeated the New York A. C. for the New York A. C. trophy.

FERSAN. A new remedy for use in anæmia is fersan. It is made from fresh beef blood, and is a soluble acid albuminate of iron. The red blood cells, separated by the centrifuge, are treated with concentrated hydrochloric acid, and their iron is extracted. Fersan appears as a brown powder with a salty taste. It does not coagulate on heating. It is supposed to be absorbed from the intestine, as artificial gastric juice does not affect it. The stools are not blackened by its use, and the inference is drawn that it is all absorbed when administered.

FERTILIZATION, ARTIFICIAL. See BIOLOGY (paragraph Artificial Parthenogenesis).

FIBICH, ZDENKO, the Bohemian composer, died October 16, 1900. He was born in 1850; and, having studied at Prague, Leipzig, and Paris, in 1878 was appointed director of the Russian Church at Prague. As a composer he became one of the most prominent of the young Czech group by his so-called symphonic poems, *Othello*; *Zaboj and Slavoj*, and *Vesna*. His versatility made him popular in various lines. Among his operas may be mentioned *The Storm* (1895); *Hedy* (1896); and his greatest success, *Sarka* (1898). He also wrote symphonies, quartets, choruses, and melodramatic music to the trilogy, *Hippodamia* (1891), and published a *Method* for the piano-forte.

FIELD COLUMBIAN MUSEUM, CHICAGO. See ANTHROPOLOGY IN AMERICA.