

ications, of about two weeks each. Those who desire to take examinations on completing the course may do so, though this is not required, and are supplied with special diplomas showing their rank. Those who take no examinations are merely supplied with certificates of attendance at the school.

TUITION FEES.

The tuition fees are as follows: Full scholars (Vollschüler), of Germans, pay 100 marks for every one-half year; foreigners pay 500 marks for the same period. Foreigners are not admitted to the course in designing, nor are they admitted as practicians; German practicians pay 50 marks per month as tuition fee. Visitors, or "Hospitanten," pay 15 marks for every hour per week for the half-year, if German, if foreign, they pay 50 marks instead of 15 marks. In addition to the above fees, foreigners are required to pay 60 marks as admission fees. Tuition fees must be paid at the beginning of a course. Needy students may be relieved in whole, or part, of the payment of tuition fees. Only one course may be attended and paid for at one and the same time.

We are now ready to turn to the four departments of the school and take a closer look at their organization and work.

THE DEPARTMENT FOR SPINNING.

This department concerns itself mainly with the spinning of wool. Cotton and silk spinning are studied only as far as they are incidental to wool spinning.

The branches and hours of instruction in the department for spinning are as follows:

Subject.	Hours per week.
Spinning	8
Raw materials	1
Bookkeeping and professional arithmetic	2
Weaving	2
Chemistry and dyeing	4
Textile engineering	2
Drawing and sketching	4
Textile legislation	2
Practical work in workshop	19
Total hours per week	44

SPINNING.

The eight hours per week devoted to spinning proper include: (a) Willowing, on the various systems, mixing of qualities and colors in threads; (b) oiling (Fetten), purpose and kinds of oils, influence of same on spinning and finishing processes; (c) carding and combing (see illustration of carding room), method of operation, carding machines, difficulties, two and three carding systems; (d) fine spinning (see illustration), process and machines employed; (e) yarn twisting, degrees, directions, spools, machinery for thread-making, worsted yarns, utilization of waste products; (f) utilization of yarns, what kinds for what materials.

RAW MATERIALS.

The one hour per week for the half-year devoted to the study of raw materials includes. (a) Kinds of textile fibres, properties of same with special reference to the various kinds of wool, and the best utilization of same; (b) important wool-growing regions of the world; (c) properties and

peculiarities of wools grown in the different sections; (d) trade usage in their distinction and identification; (e) sorting of wool; (f) washing of wool, machines, and processes; (g) drying of wool, systems; (h) shoddy, manufacture of, kinds of, properties, identification and use in trade.

BOOKKEEPING AND PROFESSIONAL ARITHMETIC.

The two hours per week for a period of six months devoted to bookkeeping and professional arithmetic cover the following ground. (a) Books most practical in keeping accounts in textile concerns, and arrangement of same; (b) computations on raw materials, quantities required; (c) calculations on oils; (d) calculations on method of producing materials of given weight; (e) determination of weights in yarns, and reduction of yarn numbers from one system to another; (f) calculations on threads; (g) market prices; requirements, production.

WEAVING.

The two hours per week for a period of six months devoted to the subject of weaving include the following. (a) Definition of woven goods; (b) classification of same; (c) work preparatory to weaving, spooling, cutting, glueing, building of chains; (d) weaving proper, hand and machine looms, jacquard machines, description of numerous kinds of goods on basis of materials used, colors, closeness of chains, etc.; (e) flaws in weaving, determination of firmness of goods, main localities for manufacture of woven goods.

CHEMISTRY AND DYEING.

The four hours per week for the period of six months devoted to chemistry and dyeing include: (a) Fundamental conceptions of chemistry, elements and their combinations; (b) alkalies, acids, salts; (c) study of water, fuels, soaps, cleansing materials, oils, fats, finishing, melting, glueing, and smoothing substances; (d) chemistry of textile fibres; (e) chemical methods for the enhancement of textile fibres; mercerization, artificial silk, silk-wool; (f) carbonization, production of waterproof goods; (g) kinds of bleaching and dyeing methods; (h) production, purity, properties, and application of different colors; (i) influence of washing and finishing materials on colors and on cloth fibres; (j) determination of the properties of cotton and wool in mixtures; (k) study of the most important dyeing and printing machines from the chemical point of view.

TEXTILE ENGINEERING.

The two hours per week for the period of six months in textile engineering cover: (a) Most practical power plant for the textile manufacturer, and its most economical operation in the utilization of power; (b) boilers in general, different systems and methods of heating, boiler armatures, supervision, and testing, methods for economy in consumption of coal; (c) motor power, steam engines and turbines; water power, wheels and turbines; electrical and gas motors, determination of their strength and endurance, comparative study of value and application of these different motory agents; (d) factory buildings, different systems of construction; shed and story buildings, their advantages and disadvantages; (e) discussion and comparison of the various factory heating, ventilating, and lighting systems.

DESIGNING AND SKETCHING.

The four hours per week for the period of six months devoted to the study of designing and sketching cover the following: (a) Drawing of machines and parts of machines used in the textile industry; (b) drawing of factory grounds and