

Grammes (water) $\div 29.57$ = fluid ounces.

Grammes $\div 28.35$ = ounces avoirdupois.

Grammes per cubic centimeter $\div 27.7$ = pounds per cubic inch.

Joule $\times 0.7373$ = foot pounds.

Kilogrammes $\times 2.2046$ = pounds.

Kilogrammes $\times 35.3$ = ounces avoirdupois.

Kilogrammes $\div 1102.3$ = tons. (2,000 pounds.)

Kilogrammes per square centimeter $\times 14.223$ = pounds per square inch.

Kilogrammetres $\times 7.233$ = foot pounds.

Kilogrammes per meter $\times 0.672$ = pounds per square foot.

Kilogrammes per cubic meter $\times 0.062$ = pounds per cubic foot.

Kilogrammes per cheval vapeur $\times 2.235$ = pounds per horse power.

Kilowatts $\times 1.34$ = horse power.

Watts $\div 746$ = horse power.

Watts $\div 0.7373$ = foot pounds per second.

Calorie $\times 3.968$ = B.T.U.

Cheval vapeur $\times 0.9863$ = horse power.
(Centigrade $\times 1.8$) $\div 32$ = degrees Fahrenheit.

Francs $\times 0.193$ = dollars.

Gravity, Paris = 980.94 centimeters per second.

Scientific American.

Artificial Indigo.

The chances are that in course of time one will be unable to distinguish between what is natural and what is artificial, so closely do the substitutes for natural products resemble them. The manufacture of artificial indigo is said to be one of the latest trade developments, and we hear that it can be carried on with considerable success. The method whereby it could be procured was discovered some eighteen years ago by Professor Bayer, and his discovery has been followed by improvements in the process which has led to the production of artificial or synthetic indigo on such a large scale that the natural indigo and industry is threatened with extinction. This advance of science, if it comes up to what is expected of it, will fall terribly hard on the planters in Northern India, where it is said hundreds of thousands of natives depend on the growth of indigo for their daily bread. Such rivalry of the chemists against the natural products would undoubtedly lead to something like a public calamity.—*Oils, Colors, and Dry-saltries.*

Spectacles for the Blind.

From Russia comes the news that Prof. Norsheweski has invented an instrument, the principle of which is the sensitiveness to light of selenium and tellurium, both of which change their quality as conductors of electricity with a variation in the light to which they are exposed. In stating that the blind can see by this instrument, a relative meaning only is indicated. While their actual vision will be unaffected, they will feel the various effects of changing light by its action. It is claimed that a totally blind man has been enabled to find the windows in a room, and after some practice to distinguish approaching objects. The inventor hopes to make the instrument so efficient that the blind will be able to tell almost certainly when they are approaching an opaque or transparent substance.—*Prac. Rev.*

Retribution for Substitution.

Druggist—"Can you give me a front seat?"

St. Peter—"No, but if you'll step down below, they'll give you something just as good."

A GOOD IMITATION.—According to a patent recently taken out, artificial camphor—i.e., true camphor, not the terpene hydrochloride often called by this name—can be prepared in either of the following methods: 1. Pinene mono-hydrochloric is prepared by acting on American turpentine with hydrochloric acid gas. This is purified by sublimation in a current of steam, and converted into camphene by heating with an alkali and sodium acetate. The camphene is then oxydised, by heating it with alkaline permanganate, to camphor. 2. Camphoric acid is produced by the prolonged action of hot air and water on ordinary turpentine, and is reduced by nascent hydrogen to camphor.—*Apotheker Zeitung.*

Soson is still another meat-albumen preparation which has been put upon the market in Germany. It appears in the form of a grayish white fine powder, insoluble in water, and is said to contain 92.5 per cent. available albumen.

Venereal diseases in Prussia are reported to the board of health precisely as are other cases of contagious and infectious diseases.

Photographing Human Currents.

A few months ago some stir was made by the announcement of a discovery by Dr. Baraduc and the late Dr. Luys for photographing currents which emanate from the human body, and a good deal was heard about magnetism and other occult influences with which spiritualists deal so freely. Dr. Adrien Guebbard of St. Vallier-de-Thiery, has been investigating these supposed representations of human currents, and finds their origin a commonplace one. When a slightly fogged plate is developed in a shallow bath, and the experimenter presses his fingers on the plate during the process, streaks are observed to radiate from the parts touched. But so far from these being due to animal magnetism, the lines, Dr. Guebbard shows, are simply caused by convection currents produced by the warmth of the operator's finger. If for the latter there be substituted a small india-rubber ball filled with warm water, exactly the same impressions are produced. Similar results are obtained with a body cooled below the temperature of the developer, and in each case their intensity is greater the greater the difference of temperature. In some of the figures obtained by Dr. Guebbard, the lines closely resemble the lines of flow due to sources and sinks, or the lines assumed by iron filings in the presence of magnets. As representations of the lines of flow of convection currents, these figures may be of interest to physicists, but they clearly have no association with human currents.—*National Druggist.*

A POWERFUL MAGNET.

The use of the magnet for removing fragments of steel from the eye is well known, and recently the Manhattan Eye Hospital has installed a magnet for that purpose so powerful that it will hold 250 lbs. of steel. The magnet has been tested for eye-work; a piece of steel in the eye it was used on, which was in the posterior chamber of the vitreous, was drawn out through the opening it made on entering. The magnet is 22 inches long and 14 inches in diameter, and requires a current of 15 amperes and 110 volts to saturate it.

Miss Hu King Eng is a Chinese young lady practising medicine in her native country, after having been graduated from the University of California. She is said to have rapidly built up an enormous practice.