

commonly remunerative they must be. There were antiseptic dressings for mange, lotions for cracked heel, ointments for diseased hoofs, fever powders and drenches, dog pills, compound turpentine liniments for bruises, blister ointments, tonic mixtures for horses and cattle, etc. Large blocks of curacao aloes were exhibited and also some in gourds. As I mentioned before aloes occupies the position in veterinary therapeutics that opium does in medical practice. Messrs. Arnold & Sons had a special exhibition of instruments, some of them fearful and wonderful to look upon. The other exhibitors included Corbyn, Stacey & Co., Willows, Francis & Butler, Wyley's & Co., Hewlett & Son, Jeyes' Sanitary Compound Co., Mackey, Mackey & Co., etc.

Emol-Kelcet is the euphonious title of Messrs. Burroughs, Wellcome & Co.'s latest specialty. It is the name given to a dusting powder of exceptional fineness and possessing several unusual characteristics. The basis appears to be stearate or soapstone with some armenian bole to color it a flesh tint. There is also some purified tale or similar absorbent material present. It has received high praise from medical quarters and is put up in tasteful tins with gilt labels. It is specially recommended as a dusting powder in urticaria, pruritic affections and eczematous diseases. From a dermatological point of view, it is interesting as apparently alkaline enough to remove the epidermis when made into a paste and laid on the skin for a time. The name appears to me to be another addition to a rather long list of Messrs. Burroughs, Wellcome & Co.'s selecting which are, unfortunately, not easily remembered or their meaning clear. *Emol* is plainly a contraction of the word *Emollient*; but *Kelcet* would appear to be more suitable for an insect powder than a toilet preparation.

A new line in lozenges has just been introduced by Messrs. R. Gibson & Sons, of Manchester. The tablets are similar to the ordinary cream of tartar and sulphur ones but contain, in addition, the equivalent to a small dose of the compound decoction of sarsaparilla. This combination is claimed to be a great improvement, and, in the summer months, the consumption is proving to be very large and still increasing.

Gelatin.

Gelatin, in a dry state, is a hard, brittle substance; it is semi-transparent. The finer sorts are almost free from color, but the lower grades have a yellowish tint. When dry, gelatin, if placed in cold water, absorbs about forty per cent. of moisture, but is insoluble until heated.

Gelatin is produced by the solvent action of high pressure steam upon the skin and bones of animals, and the product—gelatin, glue or size—depends upon the selection of materials, and the temperature to which the solutions are exposed, degree of clarification attained, etc. Gel-

atin is best extracted from bones by the combined action of steam and a current of water arranged to trickle over the crushed fragments in a suitably constructed apparatus. The crushed fragments are subjected to a steam blast at a temperature of 223 degrees F., and at a pressure of about thirty pounds to the square inch. The solution obtained is purified by melting at 120 degrees F., and straining (in some processes the aid of albumen is resorted to in this last operation).

From skins the "brilliant gelatins" are prepared thus: The hides and skins are cleaned with water, and then cut into small pieces, and crushed into pulp by machinery. The pulp is passed between rollers, next mixed with water, and then heated from 150 degrees F. to 212 degrees F. When a fine and pure product is desired, the solution is mixed with a small quantity of ox-blood at a temperature not exceeding 170 degrees F. and heated. The albuminous matters in the blood become coagulated and rise as a scum, carrying with them the impurities. The heat is then withdrawn, the scum removed, and the purified liquid allowed to settle and run into coolers to congeal and dry. It is evaporated in vacuo to avoid undue exposure to heat.

Much of the French gelatin used for confectionery and culinary purposes is prepared from bones by the action of acid. The bones employed are placed whole in vessels containing a mixture of one part strong hydrochloric acid and four of water. They are allowed to remain in the acid liquid for about seven days, during which time all the earthly matter becomes dissolved, and only the animal, or gelatinous, parts remain. This is called *osseine*. While this process is going on, great care is taken to keep down the temperature of the place where the vessels are kept, for if too much heat is allowed, there is a risk of the materials becoming putrid. After a week the mass is removed from the liquid and dried. It is next digested in boiling water, at a temperature of 212 degrees F., until dissolved and converted into gelatin. When the process is ended the solution of gelatin is strained into a clean vessel, allowed to become solid, and is then cut into blocks, the large pieces being afterwards divided into thin, transparent plates or strips. Sometimes the fluid is removed from the pans in which it is made while boiling, and is poured into a vessel surrounded by cloth, or some other non-conducting substance, in which it is allowed to slowly cool, depositing its impurities as it does so. During the boiling of the macerated bones, some fat usually rises to the surface of the liquid, this is collected and sold for various purposes.

The red, or Russian gelatin, as it is sometimes called, is simply gelatin colored with cochineal, and dried in small thin sheets. It may be used, precisely the same as any other gelatin. As the demand for it is light it is not universally held in stock by dealers.

The Chinese and Japanese manufacture a very powerful gelatin from a variety of seaweed, gathered on various parts of the coast of those countries. The weed is called by the natives *tengusa* and the gelatin product obtained from it is *hai thuo*. The latter is prepared in various ways: in thin tablets, in bundles or thin thread-like strips, and also in sheets as thin as paper. By soaking in cold water for twelve hours it becomes jellyed, and in so doing absorbs an enormous quantity of the moisture. A very valuable quality in this gelatin is that it is not affected by any change of climate; jellies made from it will be as good, and relatively firm, in a temperature of 160 degrees F. as in that of 40 degrees F., a fact which makes it a very excellent article for exporters of jams and jellies. It is very largely used by manufacturers of table jellies and concentrated jellies, and for fortifying weak jams. There cannot be a doubt that where good and pure qualities of gelatin are used it forms a nutritive and useful article of food, besides being a valuable and economical ingredient for the purposes of the confectioner and pastry cook.—*Confectioners' Union*.

Doses for Pharmacists.

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The calling of the pharmacist is in responsibility on a parity with its ancient, honorable and sacred history. His duties as a servant of the public are many, and their number does not seem to diminish with the advance of time and trend of new inventions. It is not my purpose to remind you of the individual amenable duties or write an essay on the vocation of the compounder of prescriptions. What I crave is your attention to but one feature of the pharmacist's life. It is one which renders his vocation at once grave and responsible. I refer to the fact that a druggist must compound prescriptions containing, and sell over the counter medicines constituting, agents potent to the extent of taking human lives. What adds to the seriousness of the occupation is the innocence of the customer and patient, who are in no position to judge of the nature or power of the substances handled. The confident customer, trusting the knowledge of his physician and assured of the ability of the pharmacist, will take a prescription containing half-grain doses of strychnine with the frankness of a friend eating at a social dinner. So it is with the customer who calls for oxalic acid when he wants tartaric acid. To him

"A rose by any other name would smell as sweet," and "oxalic" does not startle his caution unless the pharmacist mentions the dose and lethal action of the poison.

How important it is, then, that a pharmacist has at his wit's end the dose of each remedy. True, the list of remedies is too long for mortal memory, but those