

If the stars appear unusually numerous, and the "milky way" very clearly defined, with the surrounding sky dark, or if there be a misty appearance over the stars, rain is coming; while if there be but few stars, and those very bright and sparkling, in a pale steely sky, it will be fine.

Swine, before rain, are unusually noisy and restless. Swallows in fine weather will fly high, and at the approach of rain, close to the ground; but the latter does not apply if the day is cold, in which case they hawk very low.

Common sparrows washing vigorously in a puddle on the road, or at the edge of running water, is a sure sign of rain. A baker, who kept a parrot in the dry atmosphere of the bake-offices, noticed that a few hours before rain the bird took an imaginary bath, fluttering, as if splashing water, and preening her feathers.

The woodpecker before rain becomes uneasy, uttering its cry, "Yoo, yoo—yoo, yoo, yoo," although at other times the most silent of birds. Rain generally follows within the twenty-four hours, often very soon. This may be accepted as an infallible sign. On no occasion, except in the dry summer of 1884, did I ever hear the woodpecker call without downfall following. Then one called on two separate occasions, and no rain followed, although in a few hours threatening clouds rose from the west, but dispersed without rain; still in that year heavy rains fell in one parish, while the adjoining one was left dry, so that after all there may have been rain within a very short distance. If domestic fowls keep out feeding in rain, it will con-

tinue; but if they run under shelter directly it comes on, there will probably be only a shower. Rooks, before stormy weather or gales, tumble and pitch in the air, and if they croak as they fly, "Kerk, ke-rack, kerk," instead of their usually long-drawn "Karr-r," stormy weather is coming.

If flocks of fieldfare and redwing suddenly appear on the ploughed land, sharp, hard weather follows. Robins singing at night on the topmost branches of trees, or on the tops of tall buildings, is a pretty sure sign of a fine day on the morrow. If they keep low, the contrary may be expected.

Before rain or thunder, flies are unusually troublesome in stinging. Sometimes on a summer day, without warning, all the cock-pheasants in a wood will start crowing—very often because *they* hear thunder too far distant to be perceptible to the bystander.

Should moles, after dry weather, commence throwing up their mounds and working briskly, rain will follow. In a frost, this foretells a thaw.

Gnats flying in columns in the setting sun portends a fine morrow; but sometimes the winter gnat will do so if the rain only ceases for an hour or two.

The opening of the pimpernel has been given as a sign of a fine day, and its keeping closed the reverse. No reliance can be placed on it. Sunshine causes it to open, while in cloudy weather it keeps closed, even if it be dry.

Besides the foregoing, there are numerous weather signs; but among those mentioned will always be found one or more by which a coming change can be predicted.



HOW KID GLOVES ARE MADE.

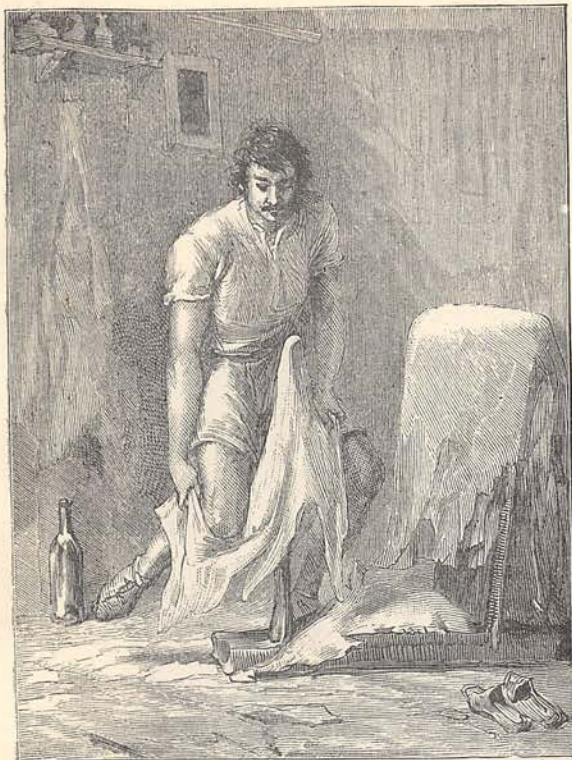
AT what period of the world's history people began to clothe their hands in gloves, is a question difficult to answer; but probably the earliest mention of such articles of attire is that in Genesis, where the mother of Jacob covered the boy's hands with the hairy skin of the goat in order that he might deceive his father.

At a later date Homer sings about them, and mention of them often occurs in Shakespeare. Gloves have been made, and indeed are now made, of many materials to suit the caprices of fashion; but kid gloves have for many years been most in favour, and—at least for some time to come—are not likely to be superseded.

The manufactories of these articles are to be found chiefly in France, being located at Paris, Grenoble, and Chaumont. Kid gloves are made, to a smaller extent, in England and Germany, but those of best

quality are usually manufactured in France. How manifold are the operations which are necessary to produce the kid covering of the hand, few people have any idea. In all there are 219 separate processes before the raw skin is converted into the kid glove.

The first thing to do is, of course, to remove the hair from the raw skins, and for this purpose lime is used, they being immersed from a fortnight to three weeks in pits containing water and lime. The skins are constantly turned and shifted about by workmen armed with long iron tongs, and when taken out it is found that the lime has loosened the cuticle of the skin, thus rendering the removal of the hair a more easy matter. From the lime-pits the skins are taken to the unhairing room, where they are stretched on a sort of wooden block, and are scraped with a blunt two-handled knife. This removes the hair. They are now taken in hand by



SOFTENING THE SKINS.

the "flesher," who cuts off the tail, the head-piece, and such portions of adipose matter as may still adhere to the skin. This waste is useful for the manufacture of glue and gelatine, the hair removed by the former process being used for mortar and for felt-making.

The skins now pass on to the "scudder," who removes any hair that may have hitherto escaped the knives of the previous operators. They are next left to soak in clear water, to remove all traces of the lime, and from thence they undergo a process of artificial fermentation, called by the French "*mise en confit*"—that is to say, they are placed in a mixture of warm water and bran, which not only removes any fleshy impurity from the skins, but also renders them soft and supple. Kid skins are not tanned like ordinary leather, such as is used for making boots or harness, by means of oak-bark, but are immersed in a large revolving "drum," which contains a mixture composed of yolk of eggs, wheaten flour, alum, and salt; and so enormous is the consumption of the former ingredients that at one factory in Chaumont no fewer than 4,000 eggs are needed every day. The skins are allowed to remain in this costly paste for rather more than an hour, the drum being kept revolving by means of machinery.

They are next taken out, and removed to the cellars for the night, and from thence are con-

veyed on the following day to the drying room, where they are subjected to a temperature varying from 140 to 160 degrees. The attendants in this room are clad in a garb similar to that of the peasantry of India, so intense is the heat; but they manage, nevertheless, to enjoy good health, and sometimes even to increase in weight. Each skin is hung separately on hooks, and thus they dry very quickly. This process leaves them somewhat hard, and they are next "seasoned" or "sammied" with cold water, and then stretched backwards and forwards over an upright knife, shaped like a half-moon. After being wetted again, they are "shaved," a process requiring great dexterity. This is accomplished by means of specially-constructed knives, which remove the under-flesh. The skins are now coated with a composition of flour, oil, and yolk of egg, which makes them soft and pliable. They are then conveyed to the dye-house, being by this time ready for the preliminary operations of dyeing.

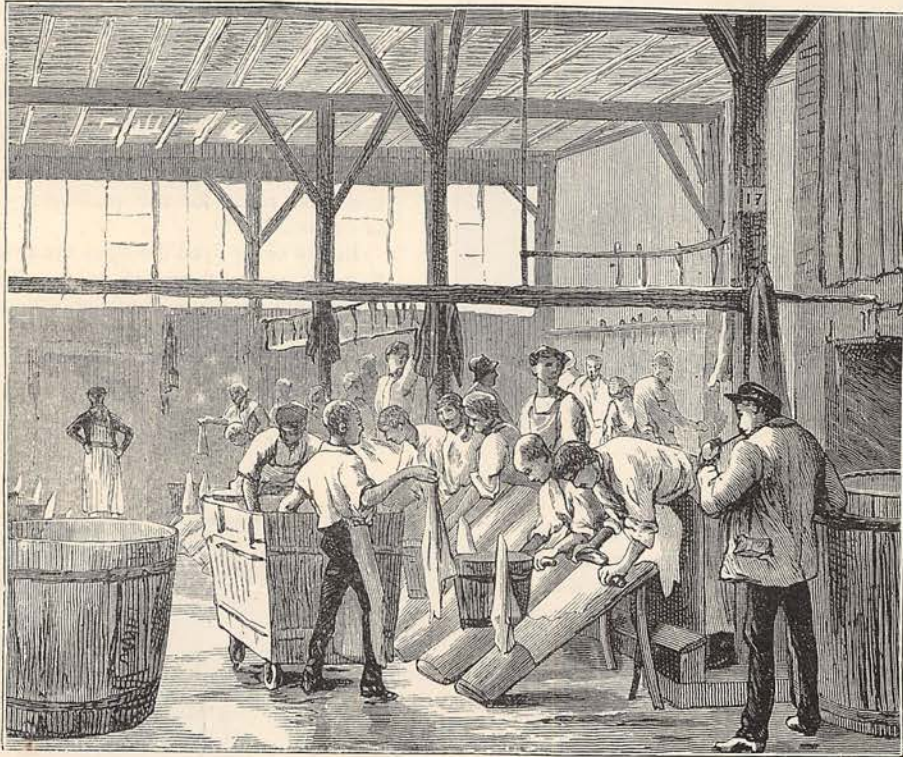
Before being dyed the skins are trodden under foot for several hours in water. This process throws out of them anything which would be opposed to the action of the dye. Having been rinsed, the skins are now moistened with more yolk of eggs, and are allowed to rest a day before they are dyed by the workmen, who, taking a brush dipped in ammonia, spread it



THE LIME-PIT.

over the skin, and then apply several coatings of the dye. For skins that are dyed on both sides, of course, another process is employed. The workmen place the skins in a large vat, and while treading them down pour in the colouring liquid. Those that are intended for black gloves show, after their first dip in the dye, a bluish tinge, but this is worked off until the skins present a brilliant and perfect black. This process is called "lustring," and is done by passing a sponge over the skins, which have been

out unsewn. The gloves, with the thumbs duly fitted and put together, are placed in a press, after which they are sent to be punched by means of machinery. The cuttings left by the punching machine are picked up with scissors by girls who are called *raffileuses*, while those who are employed making the *fourchettes*, or side-pieces for the fingers, which are also cut out by the punch, are called *fourchettieres*. It is of course necessary that the *fourchettes* should match exactly with the



SHAVING THE SKINS.

dipped in a mixture of oil and soap. They are then stretched over rolls of flannel until quite dry.

The skins, having been dried and dyed, are now subjected to a process known as "grounding," the object of which is to remove all roughness, and render them thinner and more supple. They are next sorted according to their quality and size, and are passed on to the cutters, who cut them into the several detached parts of gloves. This operation may seem to the unskilled very easy, but it requires great judgment, for the workman has to allow for the natural "stretch" of the skin. The finished skins having been selected and mapped out by the sorters, and pieced out by the cutters, are put over a frame looking like a deformed glove. These frames are so made that they represent the whole glove laid

other parts, and for this purpose "sorters" are employed to choose them. The edges of the gloves are refolded by machinery, and are then ready for sewing. In France the work of stitching is done chiefly by hand, although there are some very ingenious machines invented to perform this operation. One firm alone employs no fewer than 4,500 women and girls for this branch.

The fastenings are now attached by means of rivets, which are hammered on by girls called *riveuses*. The glove has now been sewn, and furnished with buttons. It only remains to straighten it by placing it on a glove-stick. They are then arranged in dozens, and being enveloped in paper bands, are packed in card boxes ready to be despatched from the factory.