the overhair. The fur differs from the overhair, in that it is soft, silky, curly, downy and barbed lengthwise, while the overhair is straight, smooth and comparatively rigid. These properties of fur constitute its essential value for felting purposes, and mark its difference from wool and silk; the first, after some slight preparation by the aid of hot water, readily unites its fibres into a strong and compact mass; the others can best be managed by spinning and weaving.

On the living animal the overhair keeps the fur filaments apart, prevents their tendency to felt, and protects them from injury—thus securing to the animal an immunity from cold and storm; while, as a matter of fact, this very overhair, though of an humbler name, is most generally the beauty and pride of the pelt, and marks its chief value with the furrier. We arrive thus at two distinct and opposite uses and values of fur. Regarded as useful for felt it is denominated staple fur, while with respect to its use with and on the pelt it is called fancy fur.

History.—The manufacture of fur into a felt is of comparatively modern origin, while the use of fur pelts as a covering for the body, for the couch, or for the tent is coeval with the earliest history of all northern tribes and nations. Their use was not simply a barbarous expedient to defend man from the rigours of an arctic winter; woven wool alone cannot, in its most perfect form, accomplish this. The pelt or skin is requisite to keep out the piercing wind and driving storm, while the fur and overhair ward off the cold; and "furs" are as much a necessity to-day among more northern peoples as they ever were in the days of barbarism. With them the providing of this necessary covering became the first purpose of their toil; subsequently it grew into an object of barter and traffic, at first among themselves, and afterwards with their neighbours of more temperate climes; and with the latter it naturally became an article of fashion, of ornament and of luxury. This, in brief, has been the history of its use in China, Tatary, Russia, Siberia and North America, and at present the employment of fancy furs among civilized nations has grown to be more extensive than at any former period.

The supply of this demand in earlier times led to such severe competition as to terminate in tribal pillages and even national wars; and in modern times it has led to commercial ventures on the part of individuals and companies, the account of which, told in its plainest form, reads like the pages of romance. Furs have constituted the price of redemption for royal captives, the gifts of emperors and kings, and the peculiar badge of state functionaries. At the present day they vie with precious gems and gold as ornaments and garniture for wealth and fashion; but by their abundance, and the cheapness of some varieties, they have recently come within the reach of men of moderate incomes. The history of furs can be read in Marco Polo, as he grows eloquent with the description of the rich skins of the khan of Tatary; in the early fathers of the church, who lament their introduction into Rome and Byzantium as an evidence of barbaric and debasing luxury; in the political history of Russia, stretching out a powerful arm over Siberia to secure her rich treasures; in the story of the French occupation of Canada, and the ascent of the St Lawrence to Lake Superior, and the subsequent contest to retain possession against England; in the history of early settlements of New England, New York and Virginia; in Irving's Astoria; in the records of the Hudson's Bay Company; and in the annals of the fairs held at Nizhniy Novgorod and Leipzig. Here it may suffice to give some account of skins is now chiefly a matter of private enterprise. Few, if any, monopolies exist.

Natural Supplies.—We are dependent upon the Carnivora, Rodentia, Ungulata and Marsupialia for our supplies of furs, the first two classes being by far of the greatest importance. The Carnivora include bears, wolverines, wolves, raccoons, foxes, sables, martens, skunks, kolinskis, fitch, fishers, ermines, cats, sea otters, fur seals, hair seals, lions, tigers, leopards, lynxes, jackals, &c. The Rodentia include beavers, nutrias, musk-rats or musquash, marmots, hamsters, chinchillas, hares, rabbits, squirrels, &c. The Ungulata include Persian, Astrachan, Crimean,

FUR (connected with O. Fr. forre, a sheath or case; so "an outer covering"), the name specially given to the covering of the skin in certain animals which are natives of the colder climates, lying alongside of another and longer covering, called squirrels, &c. The Ungulata include Persian, Astrachan, Crimean,

Chinese and Tibet lambs, mouflon, guanaco, goats, ponies, &c. The Marsupialia include opossums, wallabies and kangaroos. These, of course, could be subdivided, but for general purposes of the fur trade the above is deemed sufficient.

The question frequently arises, not only for those interested in the production of fur apparel, but for those who derive so much comfort and pleasure from its use, whether the supply of fur-bearing animals is likely to be exhausted. Although it is a fact that the demand is ever increasing, and that some of the rarer animals are decreasing in numbers, yet on the other hand some kinds of furs are occasionally neglected through vagaries of fashion, which give nature an opportunity to replenish their source. These respites are, however, becoming fewer every day, and what were formerly the most neglected kinds of furs are becoming more and more sought after. The supply of some of the most valuable, such as sable, silver and natural black fox, sea otter and ermine, which are all taken from animals of a more or less shy nature, does very gradually decrease with persistent hunting and the encroachment of man upon the districts where they live, but the climate of these vast regions is so cold and inhospitable that the probabilities of man ever permanently inhabiting them in numbers sufficient to scare away or exterminate the fur-bearing wild animals is unlikely. Besides these there are many useful, though commonplace, fur-bearing animals like mink, musquash, skunk, raccoon, opossum, hamster, rabbit, hares and moles, that thrive by depredations upon cultivated land. Some of these are reared upon extensive wild farms. In addition there are domestic fur-bearing animals, such as Persian, Astrachan and Chinese lambs, and goats, easily bred and available.

With regard to the rearing of the Persian lamb, there is a prevalent idea that the skins of the unborn lamb are frequently used; this, however, is a mistake. A few such skins have been taken, but they are too delicate to be of any service. The youngest, known as "broadtails," are killed when a few days old, but for the well-developed curly fur, the lambs must be six or seven weeks old. During these weeks their bodies are covered with leather so that the fur may develop in close, light and clean curls. The experiment has been tried of rearing rare, wild, fur-bearing animals in captivity, and although climatic conditions and food have been precisely as in their natural environment, the fur has been poor in quality and bad in colour, totally unlike that taken from animals in the wild state. The sensation of fear or the restriction of movement and the obtaining of food without exertion evidently prevent the normal development of the creature.

In mountainous districts in the more temperate zones some good supplies are found. Chinchillas and nutrias are obtained from South America, whence come also civet cats, jaguars, ocelots and pumas. Opossums and wallabies, good useful furs, come from Australia and New Zealand. The martens, foxes and otters imported from southern Europe and southern Asia, are very mixed in quality, and the majority are poor compared with those of Canada and the north.

Certain characteristics in the skin reveal to the expert from what section of territory they come, but in classifying them it is considered sufficient to mention territories only.

Some of the poorer sorts of furs, such as hamster, marmot, Chinese goats and lambs, Tatar ponies, weasels, kaluga, various monkeys, antelopes, foxes, otters, jackals and others from the warmer zones, which until recently were neglected on account of their inferior quality of colour, by the better class of the trade, are now being deftly dressed or dyed in Europe and America, and good effects are produced, although the lack of quality when compared with the better furs from colder climates which possess full top hair, close underwool and supple leathers, is readily manifest. It is only the pressure of increasing demand that makes marketable hard pelts with harsh brittle hair of nondescript hue, and these would, naturally, be the last to attract the notice of dealers.

As it is impossible that we shall ever discover any new furbearing animals other than those we know, it behoves responsible authorities to enforce close seasons and restrictions, as to the

sex and age, in the killing for the purpose of equalizing the numbers of the catches. As evidence of indiscriminate slaughter the case of the American buffaloes may be cited. At one time thousands of buffalo skins were obtainable and provided material for most useful coats and rugs for rough wear in cold regions, but to-day only a herd or so of the animals remain, and in captivity.

The majority of animals taken for their fur are trapped or snared, the gun being avoided as much as possible in order that the coat may be quite undamaged. Many weary hours are spent in setting baits, traps and wires, and, frequently, when the hunter retraces his steps to collect the quarry it is only to find it gone, devoured by some large animal that has visited his traps before him. After the skins have been carefully removed—the sooner after death the better for the subsequent condition of the fur—they are lightly tacked out, pelt outwards, and, without being exposed to the sun or close contact with a fire, allowed to dry in a hut or shady place where there is some warmth or movement of air. With the exception of sealskins, which are pickled in brine, all raw skins come to the various trade markets simply dried like this.

Quality and Colour.—The best fur is obtained by killing animals when the winter is at its height and the colder the season the better its quality and colour. Fur skins taken out of season are indifferent, and the hair is liable to shed itself freely; a good furrier will, however, reject such faulty specimens in the manufacturing. The finest furs are obtained from the Arctic and northern regions, and the lower the latitude the less full and silky the fur, till, at the torrid zone, fur gives place to harsh hair without any underwool. The finest and closest wools are possessed by the amphibious Carnivora and Rodentia, viz. seals, otters, beavers, nutrias and musquash, the beauty of which is not seen until after the stiff water or top hairs are pulled out or otherwise removed. In this class of animal the underneath wool of the belly is thicker than that of the back, while the opposite is true of those found on the land. The sea otter, one of the richest and rarest of furs, especially for men's wear, is an exception to this unhairing process, which it does not require, the hair being of the same length as the wool, silky and bright, quite the reverse of the case of other aquatic animals.

Of sealskins there are two distinct classes, the fur seals and the hair seals. The latter have no growth of fur under the stiff top hair and are killed, with few exceptions (generally of the marbled seals), on account of the oil and leather they yield. The best fur seals are found off the Alaska coast and down as far south as San Francisco.

It is found that in densely wooded districts furs are darker in colour than in exposed regions, and that the quality of wool and hair is softer and more silky than those from bare tracts of country, where nature exacts from its creatures greater efforts to secure food, thereby developing stronger limbs and a consequently coarser body covering.

As regards density of colour the skunk or black marten has the blackest fur, and some cats of the domestic kind, specially reared for their fur, are nearly black. Black bears have occasionally very black coats, but the majority have a brownish underwool. The natural black fox is a member of the silver fox family and is very rare, the skins bringing a high price. Most silver foxes have dark necks and in some the dark shade runs a quarter, half-way, or three-quarters, or even the whole length of the skin, but it is rather of a brownish hue. Some Russian sables are of a very dense bluish brown almost a black, which is the origin undoubtedly of the term "sables," while some, from one district in particular, have a quantity of silver hairs, evenly interspersed in the fur, a peculiarity which has nothing to do with age. The best sea otters have very dark coats which are highly esteemed, a few with silver hairs in parts; where these are equally and evenly spread the skins are very valuable. Otters and beavers that run dark in the hair or wool are more valuable than the paler ones, the wools of which are frequently touched with a chemical to produce a golden shade. This is also done with nutrias after unhairing. The darker sorts of mink,

musquash, raccoon and wolverine are more valuable than the paler skins.

Collective Supplies and Sales.—There are ten large American and Canadian companies with extensive systems for gathering the annual hauls of skins from the far-scattered trappers. These are the Hudson's Bay Co., Russian Fur Co., Alaska Commercial Co., North American Commercial Co., Russian Sealskin Co., Harmony Fur Co., Royal Greenland Fur Co., American Fur Co., Missouri Co. and Pacific Co. Most of the raw skins are forwarded to about half-a-dozen brokers in London, who roughly sort them in convenient lots, issuing catalogues to the traders of the world, and after due time for examination of the goods by intending purchasers, the lots are sold by public auction. The principal sales of general furs are held in London in January and March, smaller offerings being made in June and October, while the bulk of fur sealskins is sold separately in December. The Hudson's Bay Co.'s sales take place before the others, and, as no reserves are placed on any lot, the results are taken as exactly indicating current values. While many buyers from America and Russia are personally in attendance at the sales, many more are represented by London and Leipzig agents who buy for them upon commission. In addition to the fur skins coming from North America vast numbers from Russia, Siberia, China, Japan, Australia and South America are offered during the same periods at public auction. Fairs are also held in Siberia, Russia and Germany for the distribution of fur skins as follows:-January: Frankfort-on-the- Small collection of pro-

to programme	Control of the second	as otter, fox, fitch and
The same		marten.
February:	Irbit, Siberia .	General Russian furs.
Easter:	Leipzig, Germany	General furs.
August:	Nizhniv Novgorod.	Persian lamb and general
	Russia	furs.
August:	Kiakhta, Siberia.	Chinese furs and ermine.
December:		Chiefly squirrels.
		J 1

vincial produce, such

Oder

Of course there are many transactions, generally in the cheaper and coarser kinds of furs, used only in central Europe, Russia and Asia which in no way interest the London market, and there are many direct consignments of skins from collectors in America and Russia to London, New York and Leipzig merchants. But the bulk of the fine furs of the world is sold at the large public trade auction sales in London. The chief exceptions are the Persian and Astrachan lambs, which are bought at the Russian fairs, and are dressed and dyed in Leipzig, and the ermine and Russian squirrels, which are dressed and manufactured into linings either in Russia or Germany before offered for sale to the wholesale merchants or manufacturers.

The annual collection of fur skins varies considerably in quantity according to the demand and to the good or bad climatic conditions of the season; and it is impossible to give a complete record, as many skins are used in the country of their origin or exported direct to merchants. But a fairly exact statement of the numbers sold in the great public trade auction sales in London during the year 1905–1906 is herewith set out.

	ear endir	ig 31st of	March 1	<i>906</i> . ]	otal Number
	#1 2				of Skins.
Badger		•			28,634
Badger, Japan	ese				6,026
Bear		المراجع والما			18,576
Beaver				• •	80,514
Cat, Civet .					157,915
Cat, House .		٠.			126,703
,, Wild .					32,253
Chinchilla (La	Plata), k	nown als	o as Bas	tard .	43,578
Per	uvian fine	st .			5,603
Deer, Chinese		:			124,355
Ermine		•			40,641
Fisher				•	5,949
Fitch .			• •	•	
Fox. Blue.		•	5. 2° 2	•	77,578 1,893
" Cross .		• .	•	•	
~	yaar i	•	•	•	10,276
		•	•	• . •	59,561
Japanese		•	• ' • • • •	• •	81,429
, Kit	STD TO	. •	•	• 1 € • 1	4,023
Red .	ing it start		· Cartaga	1011	158,961
,, Silver .			•	•	2,510
,, White .	·	4 to 1 '	•	• ***	27,463

Goats, Chinese	261,190
Hares	41,256
Kangaroo	7,115
Kid, Chinese linings and skins equal to .	5,080,047
Kolinsky.	114,251
Lamb, Mongolian linings and skins equal to .	214,072
Slink	167,372
Tibet ""	794,130
Leopard . ""	3,574
Lynx	88,822
Marmot, linings and skins equal to	1,600,600
Marten, Baum	4,573
" Japanese	16,461
Stone	
Mink, Canadian and American	12,939
Japanese	299,254
Mouflon .	360,373
Musk-rat or Musquash, Brown	23,594
", Black	5,126,339
Nutria	41,788
Opossum, American	82,474
, Australian	902,065
	4,161,685
Otter, River	21,235
,, Sea	522
" Sea Raccoon	522 310,712
" Sea Raccoon . Sable, Canadian and American	522 310,712 97,282
" Sea Raccoon . Sable, Canadian and American " Japanese	522 310,712 97,282 556
,, Sea Raccoon Sable, Canadian and American ,, Japanese ,, Russian	522 310,712 97,282 556 26,399
,, Sea Raccoon Sable, Canadian and American ,, Japanese ,, Russian Seals, Fur	522 310,712 97,282 556 26,399 77,000
Raccoon Sable, Canadian and American Japanese Russian Seals, Fur Hair	522 310,712 97,282 556 26,399 77,000 31,943
,, Sea Raccoon Sable, Canadian and American ,, Japanese ,, Russian Seals, Fur ,, Hair Skunk	522 310,712 97,282 556 26,399 77,000 31,943 1,068,408
" Sea Raccoon Sable, Canadian and American " Japanese " Russian Seals, Fur " Hair Skunk Squirrel	522 310,712 97,282 556 26,399 77,000 31,943 1,068,408 194,596
Raccoon. Sable, Canadian and American Japanese Russian Seals, Fur Hair Skunk Squirrel Jinings each averaging 126 skins.	522 310,712 97,282 556 26,399 77,000 31,943 1,068,408 194,596 1,982,736
Raccoon Sable, Canadian and American Japanese Russian Seals, Fur Hair Skunk Squirrel Linings each averaging 126 skins. Tiger	310,712 97,282 97,282 26,399 77,000 31,943 1,068,408 194,596 1,982,736 392
Raccoon Sable, Canadian and American , Japanese , Russian Seals, Fur , Hair Skunk Squirrel , Linings each averaging 126 skins. Tiger Wallaby	522 310,712 97,282 556 26,399 77,000 31,943 1,068,408 194,596 1,982,736 392 60,956
Raccoon . Sable, Canadian and American Japanese Russian Seals, Fur Hair Skunk Squirrel Linings each averaging 126 skins Tiger Wallaby Wolf.	522 310,712 97,282 556 26,399 77,003 1,068,408 194,596 1,982,736 392 60,956 56,642
Raccoon Sable, Canadian and American , Japanese , Russian Seals, Fur , Hair Skunk Squirrel , Linings each averaging 126 skins. Tiger Wallaby	522 310,712 97,282 556 26,399 77,000 31,943 1,068,408 194,596 1,982,736 392 60,956

A brief account of the different qualities of the pelts, with some general remarks as to their customary uses, follows. The prices quoted are subject to constant fluctuation and represent purely trade prices for bulk, and it should be explained that the very great variations are due to different sizes, qualities and colours, and moreover are only first cost, before skins are dressed and prepared. These preparations are in some cases expensive, and there is generally a considerable percentage of waste. The prices cannot be taken as a guide to the wholesale price of a single and finished skin, but simply as relative value.

The fullest and darkest skins of each kind are the most valuable, and, in cases of bluish grey or white, the fuller, clearer and brighter are the more expensive. A few albinos are found in every species, but whatever their value to a museum, they are of little commercial importance. Some odd lots of skins arrive designated simply as "sundries," so no classification is possible, and this will account for the absence of a few names of skins of which the imports are insignificant in quantity, or are received direct by the wholesale merchants.

## Names, Qualities and Uses of Pelts.1

ASTRACHAN.—See Lambs, below.

BADGER.—Size 2×1 ft. American sorts have coarse thick underwool of a pale fawn or stone colour with a growth of longer black and white hairs, 3 or 4 in long; a very durable but clumsy fur. The best skins are exported to France, Spain and Italy, and used for carriage rugs and military purposes. Asiatic, including Japanese, skins are more woolly. Russian and Prussian kinds are coarser and darker, and used mostly for brush trade. Value 6d. to 19s.

BEAR, AUSTRALIAN.—See Wombat, below.
BEAR, BLACK.—Size 6×3 ft. Fine dark brown underwool with bright black and flowing top hair 4 in. long. Cubs are nearly as long in the hair although only about half the size and not only softer and better, but have the advantage of being very much lighter in pelt. Widely distributed in North America, the best come from Canada, are costly and are used for military caps, boas, muffs, trimmings, carriage rugs and coachmen's capes, and the fur wears exceedingly well. Value 17s. 6d. to 86s. Those from East India and warm climates are harsh, poor and only fit for floor rugs.

BEAR, BROWN.—Size 6×3 ft. Similar in quality to the black, but far more limited in number; the colours range from light yellow to a rich dark brown. The best come from Hudson Bay territory and are valuable. Used for muffs, trimmings, boas, and carriage

<sup>&</sup>lt;sup>1</sup> The measurements given are from nose to root of tail of average large sizes after the dressing process, which has a shrinking tendency. The depths of fur quoted are the greatest, but there are plenty of good useful skins possessing a lesser depth.

rugs. Inferior sorts, almost grizzly in effect and some very pale, are found in Europe and Asia and are mostly used locally. In India there is a species called Isabelline bear, which was formerly imported to Great Britain, but does not now arrive in any quantity worth

The britain, but does not now arrive in any quantity worth mentioning. Value 10s. 6d. to 60s., Isabelline sort 10s. 6d. to 78s.

BEAR, GRIZZLY.—Size 8×4 ft. Coarse hair, heavy pelt, mostly dark yellowish and brown colours, only found in western parts of United States, Russia and Siberia. Used as carriage rugs and floor rugs, most durable for latter purpose and of fine effect. They are about half the value of brown bear. Value 15s. to 54s.

REAR ISABELLINE—See Regg. Regging about

BEAR, ISABELLINE.—See Bear, Brown, above.

BEAR, WHITE.—Size 10×5 ft. The largest of all bears. Short close hair except on flanks, colour white to yellow. An inhabitant of the Arctic circle, best from Greenland. Used for floor rugs, very durable; and very white specimens are valuable. Value 20s. to 520s.

Beaver. Size 3×2 ft. The largest of rodents, it possesses a close underwool of bluish-brown hue, nearly an inch in depth, with coarse, bright, black or reddish-brown top hair, 3 in long. Found widely in North America. After being unhaired the darkest wools are the most valuable, although many people prefer the bright, lighter brown tones. Used for collars, cuffs, boas, muffs, trimmings, coat linings and carriage aprons, and is of a most durable nature, in addition to having a rich and good appearance. Value 10s. to

BROADTAIL.—See Lambs, below.
CARACAL.—A small lynx from India, the fur very poor, seldom imported.

CARACUL.—See Goats and Lambs, below.
CAT, CIVET.—Size  $9 \times 4\frac{1}{2}$  in., short, thick and dark underwool with silky black top hair with irregular and unique white markings. It is similar to skunk, but is much lighter in weight, softer and less the similar to skunk, but is much lighter in weight, softer and less than the same of the coat linings it is full, without any disagreeable odour. Used for coat linings it is very warm and durable. A few come from China, but the fur is yellowish-grey, slightly spotted and worth little. Value 1s. 1d. to is. IId

CAT, HOUSE, &c.—18×9 in., mostly black and dark brown, imported from Holland, Bavaria, America and Russia, where they are reared for their coats. The best, from Holland, are used for coat linings. Although in colour, weight and warmth they are excellent, the fur is apt to become loose and to fall off with friction of wear. The black are known as genet, although the true genet is a spotted wild cat. Wild sorts of the tabby order are coarser, and not so good and silky in effect as when domestically reared. Value of the black sorts 2d. to 3s. Wild 9d. to 14s. Some small wild cats, very poor flat fur of a pale fawn colour with yellow spots, are imported from Australia and used for linings. Value 5\frac{1}{2}d. to 1s. 1d.

from Australia and used for linings. Value 530, to 18. 10.

CHEETAH.—Size of a small leopard and similar in colour, but has black spots in lieu of rings. Only a few are now imported, which are used for mats. Value 28. 6d. to 18s.

CHINCHILLA, PERUVIAN and BOLIVIAN.—Size 12×7 in., fur 1 to

11 in deep. Delicate blue-grey with black shadings, one of nature's most beautiful productions, though not a durable one. Used for ladies' coats, stoles, muffs, hats and trimmings. Yearly becoming scarcer and most costly. Value 8s. 6d. to 56s. 8d.

CHINCHILLA, LA PLATA, incorrectly named and known in the trade as "bastard chinchilla," size 9×4 in., in a similar species, but owing to lower altitudes and warmer climatic conditions of habitation is smaller, with shorter and less beautiful fur, the underwool colour being darker and the top colour less pure. Used exactly as the better kind, and the picked skins are most effective. As with the best sort it is not serviceable for constant wear. Value 4s. 2d. to

27% 6d.
CHINCHILLONE.—Size 13×8 in., obtained also from South America Fur is longer and weaker and poorer and yellower than chinchilla. Probably a crossbred animal, very limited importation. Value

3s. 6d. to 16s. 8d.

DEER, CHINESE and EAST INDIAN.—Small, light, pelted skins, the majority of which are used for mats. Reindeer and other varieties are of little interest for use other than trophy mats. Phousands are taken for the leather trade. Value of Chinese 1s. 2d. to is. 6d. each.

Dog. The only dogs that are used in the fur trade in civilized countries are those imported from China, which are heavy and coarse, and only used in the cheaper trade, chiefly for rugs. Value

Dog Wolf.—See Wolf, below.

ERMINE.—Size 12 X21 in. Underwool short and even, with a shade the height of winter the colour is pure white with exception of the tip of tail, which is quite black. Supplies are obtained from Siberia and America. Best are from Ishim in Siberia. Used for cloak linings, stoles, muffs and trimmings, also for embellishment of British state, parliamentary and legal robes. When this fur is stimmetrically spotted with black lamb pieces it is styled miniver,

symmetrically spotted with black lamb pieces it is styled miniver, in which form it is used at the grand coronation functions of British sovereigns. Value 1s. 3d. to 8s. 6d.

FISHER.—Size 30×12 in., tail 12 to 18 in. long, the largest of the martens; has a dark shaded deep underwool with fine, glossy, dark and strong top hair 2 in. or more long. Best obtained from British America. The tails are almost black and make up most handsomely

into trimmings, muffs, &c. Tails worked separately in these forms are as rich and fine and more durable than any other fur suitable for a like purpose. The fur of the skin itself is something like a dark silky raccoon, but is not as attractive as the tails. Value 12s. to 46s.

FITCH.—Size 12 $\times$ 3 in., of the marten species, also known as the pole cat. Yellow underwool  $\frac{1}{3}$  in. deep, black top hair,  $1\frac{1}{2}$  to  $1\frac{3}{4}$  in. long, very fine and open in growth, and not close as in martens. Largest skins come from Denmark, Holland and Germany. The Russian are smaller, but more silky and, as now dyed, make a cheap

Russian are smaller, but more silky and, as now dyed, make a cheap and fair substitute for sable. They are excellent for linings of ladies' coats, being of light weight and fairly strong in the pelt. English mayors' and civic officials' robes are frequently trimmed with this fur in lieu of sable. Value of the German variety 2s. to 5s. 6d. and of the Russian 7d. to 1s. 4d.

Fox, Blue.—Size 24×8 in. Underwool thick and long. Top hair fine and not so plentiful as in other foxes. Found in Alaska, Hudson Bay territory, Archangel and Greenland. Although called blue, the colour is a slaty or drab tone. Those from Archangel are more silky and of a smoky bluish colour and are the most valuable. These are scarce and consequently dear. The white foxes that are dyed smoke and celestial blue are brilliant and totally unlike the browner shades of this fox. Value 34s. to 195s.

Fox, Common.—The variation of size and quality is considerable, and the colour is anything from grey to red. In Great Britain the animal is now only regarded for the sport it provides. On the European continent, however, some hundreds of thousands of skins, principally German, Russian and Norwegian, are sold annually for home use, and for dyeing and exportation, chiefly to the United The qualities do not compare with those species found in North America and the Arctic circle. The Asiatic, African and South American varieties are, with the exception of those taken in the mountains, poorly furred and usually brittle and therefore of no great service. No commercial value can be quoted.

Fox, Cross.—Size 20×7 in., are about as large as the silver and generally have a pale yellowish or orange tone with some silvery

generally have a pale yellowish or orange tone with some silvery points and a darkish cross marking on the shoulders. Some are very similar to the pale red fox from the North-West of America and a few are exceptionally large. The darkest and best come from Labrador and Hudson Bay, and the ordinary sorts from the north-west of the United States and, as with silver and other kinds, the quality is inferior when taken from warmer latitudes. Value 10s. 6d.

Fox, Grey.—Size 27×10 in. Has a close dark drab underwool with yellowish grizzly, grey, regular and coarse top hair. The majority used for the trade come from Virginia and the southern and western parts of the United States. Those from the west are larger than the average, with more fur of a brighter tone. The fur is fairly serviceable for carriage rugs, the leather being stout, but its

harshness of quality and nondescript colour does not contribute to make it a favourite. Value 9d. to 4s. 9d.

FOX, JAPANESE.—See Fox, Red, and Raccoon, below.

FOX, KIT.—Size 20×6 in. The underwool is short and soft, as is also the top hair, which is of very pale grey mixed with some yellowish-white hair. It is the smallest of foxes, and is found in Coundle and the parthern section of the United States. Canada and the northern section of the United States. It is similar in colour and quality to the prairie fox and to many kinds from the warmer zones, such as from Turkey, eastern Asia and elsewhere. Value 1s. 3d. to 5s. 6d.

Fox, Red.—Size 24×8 in., though a few kinds are much larger.

The underwool is long and soft and the hair plentiful and strong. It is found widely in the northern parts of America and in smaller numbers south of the United States, also in China, Japan and Australia. The colours vary from pale yellowish to a dark red, some being very brilliant. Those of Kamschatka are rich and fine in quality. Farther north, especially near the sea, the fur is coarse. Where the best coloured skins are not used for carriage rugs they are extensively dyed, and badger and other white hairs are inserted extensively dyed, and badger and other white hairs are inserted to resemble silver fox. They are also dyed a sable colour. The skins, being the strongest of foxes', both in the fur and pelt, are serviceable. The preparations in imitation of the natural black and silver sorts are very good and attractive. Value 1s. to 41s.

Fox, Silver. Size 30×10 in. Underwool close and fine. Top hair black to silvery, 3 in. long. The fur upon the necks usually runs dark, almost black, and in some cases the fur is black halfway down the length of the skin, in rarer cases three-quarters of the

down the length of the skin, in rarer cases three-quarters of the length and, in the most exceptional instances, the whole length, and when this is the case they are known as "Natural Black Foxes" and fetch enormous prices. The even silvery sorts are highly esteemed, and the fur is one of the most effective and precious. The finest are taken in Labrador. The farther south they are found, the poorer and coarser the fur. The brush has invariably a white

tip. Value fit to f320.

Fox, White.—Size 20×7 in. Animals of this species are generally small in size and inhabit the extreme northern sections of Hudson Bay, Newfoundland, Greenland, Labrador and Siberia. Canadian are silky in nature and inclined to a creamy colour, while the Siberian are more woolly and rather whiter. Those taken in central Asia near or in Chinese territory are poorer and yellowish. The underwool in all sorts is generally of a bluish-grey tone; but the top hair in the depth of winter is usually full enough in quantity to

hide any such variation. Those skins in which the underwool is quite white are rare and much more expensive. In summer specimens of this species, as with other white furred animals, have slightly discoloured coats. The skins that are not perfectly white are dyed discoloured coats. The skins that are not perfectly write are uyed jet black, dark or light smoke, violet-blue, blue-grey, and also in imitation of the drab shades of the natural blue. Value 18s. to 66s.

Gener.—Size 10×4 in. The genet proper is a small white spotted

cat found in Europe, but the quantity is too small to be of commercial

cat found in Europe, but the quantity is too sman to be of commercial interest. The name has been adopted for the black cats used so much in the trade. (See Cats, above.) Value 1s. to 6s. 6d.

Goats.—Size varies greatly. The European, Arabian and East Indian kinds are seldom used for rugs, the skins are chiefly dressed as leather for books and furniture, and the kids for boots and gloves, and the finer wool and hair are woven into various materials. Many from Russia are dyed black for floor and carriage rugs; the hair is brittle, with poor underwool and not very durable; the cost, however, is small. The Chinese export thousands of similar skins in black, grey and white, usually ready dressed and made into rugs of two skins each. A great many are dyed black and brown, in imitation of bear, and are used largely in the western parts of the United States and Canada for sleigh and carriage rugs. Many are used for their leather. Thousands of the kids are also dyed black and worked into cross-shaped pieces, in which shape they are largely exported to Germany, France, Great Britain and America, and sold by the retail as caracal, kid or caracul. The grey ones are in good demand for motor coats. The word caracul has been adopted from the Turking and pieces for the coats.

for motor coats. The word caracul has been adopted from the Turkish and signifies black-eared. See also Lambs, caracul. Value of Chinese white 3s. 6d. to 6s. 6d.; grey, 4s. to 6s. 9d.

The Angora from the heights of central Asia Minor has curly, fleecy, silky, white wool, 4 to 7 in. long. The fur is not used in Great Britain, as formerly, and the greater quantity, known as mohair, is now imported for purposes of weaving. This species of goat was some years since introduced into Cape Colony, but its wool is not so good as the Asiatic breed. Good business, however, is done with the product, but chiefly for leather. Value 4s. to 12s. 6d. the product, but chiefly for leather. Value 4s. to 12s. 6d.

The Mongolian goat has a very soft silk underwool, and after the

long top hair is removed it is dressed and imported and erroneously named mouflon. The colour is a light fawn, but it is so pale that it lends itself to be dyed any colour. It was popular some years since in the cheaper trade, but it is not now much seen in England. Value

2s. to 6s.

The Tibet goat is similar to the Angora in the fineness of its wool,

The Tibet goat is similar to the making of cashmere shawls. The Tibet

and many are used in the making of cashmere shawls. The Tibet lamb so largely imported and used for children's wear is often miscalled Tibet goat. Value 3s. to 7s. 6d.

Guanaco.—Size 30×15 in. Is a species of goat found in Patagonia and other parts of South America. It has a very long neck and exceedingly soft woolly fur of a light reddish-fawn colour with very white flanks. It is usually imported in small quantities, native dressed, and ready made into rugs. The dressing is hard and brittle. If the skins are dressed in Europe they afford a very comfortable rug, though a very marked one in effect. They have a similar wool to the vicuna, but coarser and redder; both are largely used in South America. Value 1s. to 4s. 6d.

Hamster.—Size 8×3½ in. A destructive rodent, is found in great numbers in Russia and Germany. The fur is very flat and poor, of a yellowish pale brown with a little marking of black. Being of a light weight it is used for linings. Value 3d. to 1s.

Hare.—Size 24×9 in. The common hare of Europe does not much interest the furrier, the fur being chiefly used by makers of hatters' felt. The white hares, however, of Russia, Siberia and other regions in the Arctic circle are very largely used in the cheaper trade

regions in the Arctic circle are very largely used in the cheaper trade of Europe, America and the British colonies. The fur is of the whitest when killed in winter, and that upon the flanks of the animal whitest when kined in whiter, and that upon the hanks of the animal is very much longer than that upon its back. The flanks are usually cut off and made into muffs and stoles. The hair is, however, brittle and is not at all durable. This fur is dyed jet black and various shades of brown and grey, and manufactured into articles for the small drapers and for exportation. The North American hares are also dyed black and brown and used in the same way. Value of the same way. of white 2d. to 5d.

JACKAL.—Size 2 to 3 ft. long. Is found in India and north and south Africa. Indian are light brown and reddish, those from the Cape are dark grey and rather silvery. Few are imported. Fur generally poor and harsh, only suitable for carriage rugs. Value 1s. to 3s. 6d.

JAGUAR.—Size 7 to 10 ft. long. Is found in Mexico and British Honduras. The markings are an irregular ring formation with a spot in the centre. Leopards have rings only and cheetahs solid spots. Suitable only for hearthrugs. Supply very limited. Value

KALUGA.—See Souslik, below.

KANGAROO.—The sizes vary considerably, some being huge, others quite small. The larger varieties, viz. the red and the great, do not usually interest furriers, the fur being harsh and poor without underwool. They are tanned for the leather trade. The sorts used for carriage aprons, coat linings and the outside of motor coats include: blue kangaroo, bush kangaroo, bridled kangaroo, wallaroo, yellow kangaroo, rock wallaby, swamp wallaby and short-tailed wallaby. Many of the swamp sort are dyed to imitate skunk and

look well. Generally the colours are yellowish or brown. Some are dark brown as in the swamp, which being strong are suitable for The rock wallabies are soft and woolly and often of a pretty bluish tone, and make moderately useful carriage rugs and perambulator aprons. The redder and browner sorts are also good for rugs as they are thick in the pelt. On the European continent many of these are dyed. The best of the lighter weights are frequently insufficiently strong in the hair to stand the friction of wear in a coat lining. Value, kangaroo 9d. to 3s., wallaby  $1\frac{1}{2}d$ . to 5s. 3d., wallaroo is. to 5s. 6d.

wallaroo is. to 5s. 6d.

KIDS.—See Goats, above.

KOLINSKY.—Size 12×2½ in. Is one of the marten tribe. The underwool is short and rather weak, but regular, as is also the top hair; the colour is usually yellow. They have been successfully dyed and used as a substitute for sable. They are found in Siberia, Amoor, China and Japan, but the best are from Siberia. They are light in weight and therefore suitable for linings of coats. The tails are used for artists' "sable" brushes. The fur has often been designated as red or Tatar sable. Value is. 6d. to 4s. 6d.

LAMBS.—The sorts that primarily interest the fur trade in Europe and America are those from south Russia. Persia and Afghanistan

and America are those from south Russia, Persia and Afghanistan, which are included under the following wholesale or retail commercial terms: Persian lamb, broadtail, astrachan, Shiraz, Bokharan and caracul lamb. With the public the general term astrachan is an old one, embracing all the above curly sorts; the flatter kinds, as broadtail and caracul lamb, have always been named separately. The Persian lambs, size 18×9 in., are the finest and the best of them. When dressed and dyed they should have regular, close and bright curl, varying from a small to a very large one, and if of equal size, regularity, tightness and brightness, the value is comparatively a matter of fancy. Those that are dull and loose, or very coarse and flat in the curl, are of far less market value.

All the above enumerated lambs are naturally a rusty black or brown, and with very few exceptions are dyed a jet black. Lustre, however, cannot be imparted unless the wool was originally of a silky nature. Broadtails, size  $10 \times 5$  in, are the very young of the Persian sheep, and are killed before the wool has time to develop beyond the flat wavy state which can be best compared to a piece of moiré silk. They are naturally exceedingly light in weight, and those that are of an even pattern, possessing a lustrous sheen, are costly. There is, notwithstanding, a great demand for these from the fashionable world, as not only are they very effective, but being so flat in the wool the figure of the wearer can be shown as perfectly as in a garment made of silk. It cannot be regarded as an economical fur, as the pelt is too delicate to resist hard wear.

> Persian Lamb price 12s. 6d. to 25s. Broadtail " IOS. ,, 35s.

Astrachan, Shiraz and Bokharan lambs, size 22 by 9 in., are of a coarser, looser curl, and chiefly used for coat linings, while the Persians are used for outside of garments, collars, cuffs, stoles, muffs, hats and trimmings and gloves. The so-called caracul lambs, size 12×6 in., are the very young of the astrachan sheep, and the pick of them are almost as effective as broadtails, although less fine in the texture. See also remarks as to caracul kid under *Goats*, above.

Astrachan price Is. to 5s. 6d. Caracul Lamb ,, 2s. 6d ,, 10s. 6d. Shiraz ,, 4s. 6d ,, 10s. " Bokharan Is. 6d ,, 3s. 6d.

Grey lambs, size 24 × 10 in., are obtained from the Crimea and known in the trade as "crimmers." They are of a similar nature to the caracul lambs, but looser in curl, ranging from a very light to a dark grey. The best are the pale bluish greys, and are chiefly used for ladies' coats, stoles, muffs and hats. Price 2s. to 6s. Mongolian lambs, size 24 × 15 in., are of a short wavy loose curl, creamy white colour, and are usually exported from China dressed, the majority being ready-made into cross-shaped coats or linings. They are used principally for linings of good evening wraps for ladies. Price 1s. to 2s. 6d. Slink lambs come from South America and China. The former are very small and generally those that are stillborn. They

former are very small and generally those that are stillborn. They have a particularly thin pelt with very close wool of minute curl. The China sorts are much larger. The smallest are used for glove linings and the others for opera cloak linings. Price 1s. to 6s. 6d.

LEOPARD.—Size 3 to 6 ft. long. There are several kinds, the chief being the snow or ounce, Chinese, Bengal, Persian, East Indian and African. The first variety inhabit the Himalayas and are beautifully covered with a deep soft fur quite long compared to the flat harsh hair of the Bengal sort. The colours are pale orange and white with very dark markings, a strong contrast making a fine effect. Most artists prize these skins above all others. The Chinese are of a medium orange brown colour, but full in fur. The East Indian are less full and not so dark. The Bengal are dark and medium in colour, short and hard hair, but useful for floor rugs, as they do not hold the dust like the fuller and softer hair of the kinds previously named. They are also used for drummers' aprons and saddle cloths in the Indian army. The African are small with pale lemon colour grounds Indian army. The African are small with pale lemon colour grounds very closely marked with black spots on the skin, the strong contrast making a pleasing effect. Occasionally, where something very marked is wanted, skating jackets and carriage aprons are made

**FUR** 35I

from the softest and flattest of skins, but usually they are made into settee covers, floor rugs and foot muffs. Value 2s. to 40s.

Lion.—Size 5 to 6 ft. long. These skins are found in Africa, Arabia and part of India, and are every year becoming scarcer. They are only used for floor rugs, and the males are more highly esteemed on account of the set-off of the mane. Value, lions' £10

to f100; lionesses' £5 to £25.

Lynx.—Size 45×20 in. The underwool is thinner than fox, but the top hair is fine, silky and flowing, 4 in. long, of a pale grey, slightly mottled with fine streaks and dark spots. The fur upon the flanks is longer and white with very pronounced markings of dark spots, and this part of the skin is generally worked separately from the rest and is very effective for gown trimmings. Where the colour is of a sandy and reddish hue the value is far less than where it is of a bluish tone. They inhabit North America as far south as California, also Norway and Sweden. Those from the Hudson Bay district and Sweden are the best and are very similar. Those taken in Central Asia are mostly used locally. For attire the skins manufactured in Europe are generally dyed black or brown, in which state it has a similar appearance to dyed fox, but having less thick underwool and finer hair flows freely. The finest skins when dyed black are used very largely in America in place of the dyed black fox so fashionable for mourning wear in Great Britain and France. The British Hussar busbies are made of the dark brown lynx, and it is the free silky easy movement of the fur with the least disturbance in the atmosphere that gives it such a pleasing effect. It is used for rugs in its natural state and also in Turkey as trimmings for

garments. Value 13s. 6d. to 56s.

Lynx Cat or Bay Lynx.—Is about half the size and depth of fur of a lynx proper, and inhabits the central United States. It is a flat and reddish fur compared to the lynx and is suitable for cheap carriage aprons. A few come from Canada and are of better quality.

Value 5s. to 15s.

MARMOT.—Size 18×12 in. Is a rodent and is found in considerable numbers in the south of Prussia. The fur is a yellowish brown and rather harsh and brittle and has no underwool. Since, however, the value of all good furs has advanced, dyers and manufacturers have made very successful efforts with this fur. The Viennese have been particularly successful, and their method has been to dye the skins a good brown and then not put in the dark stripes, which exist in sable and mink, until the garment or article is finished, thus obtaining as perfectly symmetrical effects as if the articles were made of small skins instead of large ones. Marmots are also found in North America, Canada and China; the best, however, come from Russia. It should always be a cheap fur, having so few good qualities to recommend it. Value 9d. to 2s. 6d.

Marten, American.—See Sable, below.

Marten, Baum.—Size 16×5 in. Is sometimes called the pine marten, and is found in quantity in the wooded and mountainous districts of Russia, Norway, Germany and Switzerland. It possesses a thick underwool with strong top hair, and ranges from a pale to a dark bluish brown. The best, from Norway, are very durable and of good appearance and an excellent substitute for American sable. The tails when split into two or three, with small strips of narrow tape so as to separate the otherwise dense fur, formerly made very handsome sets of trimmings, ties and muffs, and the probabilities are, as with other fashions, such use will have its period of revival. Value 6s. to 85s.

MARTEN, BLACK.—See Skunk, below.

MARTEN, JAPANESE.—Size 16×5 in. Is of a woolly nature with rather coarse top hair and quite yellow in colour. It is dyed for the cheap trade for boas and muffs, but it is not an attractive fur at the best of times. It lacks a silky, bright and fresh appearance, and therefore is unlikely to be in great demand, except where economy

is an object. Value 6s. 6d. to 18s. 6d.

MARTEN, STONE.—Size and quality similar to the baum; the colour, however, of the underwool is a stony white and the top hair is very dark, almost black. They live in rocky and stony districts. Skins of a pale bluish tone are generally used in their natural state for stoles, boas and muffs, but the less clear coloured skins are dyed in beautiful shades similar in density to the dark and valuable sables from Russia, and are the most effective skins that can be purchased at a reasonable price. The tails have also been worked, in the manner explained with regard to the baum marten, as sets of trimmings and in other forms. Stone martens are found in Russia, Bosnia, Turkey, Greece, Germany, the Alps and France. The Bosnian and the French are the best in colour. The Asiatic sorts are less woolly, but being silky are useful when dyed. There are many from Afghanistan and India which are too poor to interest the less woony, but being sinky are useful when dyed. There are many from Afghanistan and India which are too poor to interest the European markets. Value 7s. 6d. to 26s.

Mink.—Size 16×5 in. Is of the amphibious class and is found throughout North America and in Russia, China and Japan. The

underwool is short, close and even, as is also the top hair, which is The best skins are very dark and are obtained from In the central states of America the colour is a good very strong. Nova Scotia. brown, but in the north-west and south-west the fur is coarse and generally pale. It is very durable for linings, and is an economical substitute for sable for coats, capes, boas and trimmings. Values have greatly increased, and the fur possessing good qualities as to colour and durability will doubtless always be in good request. The Russian species is dark but flat and poor in quality, and the Chinese and Japanese are so pale that they are invariably dyed. These, however, are of very inferior nature. Value of American

These, nowever, are of very interior nature. Value of American 3s. 3d. to 40s., Japanese 3d. to 2s. 3d.

MOLE.—Size  $3\frac{1}{2} \times 2\frac{1}{2}$  in. Moles are plentiful in the British Isles and Europe, and owing to their lovely velvety coats of exquisite blue shade and to the dearness of other furs are much in demand. Though the fur is cheap in itself, the expense of dressing and working up these little skins is considerable, and they possess the unique charm of an exceptional colour with little weight of pelt; the quality of resistance to friction is, however, so slight as to make them expensive in wear. The best are the dark blue from the Fen district of

Cambridgeshire in England. Value \( \frac{1}{2} d\). to 2d.

Mongolian Lambs.—See \( Lambs\), above.

Monkey, Black.—Size 18 × 10 in. Among the species of monkeys

only one interests to any extent the fur trade, and that is the black monkey taken on the west coast of Africa (*Colobus satanas*). The hair is very long, very black and bright with no underwool, and the white pelt of the base of the hair, by reason of the great contrast of colour, is very noticeable. The skins were in 1850 very fashionable in England for stoles, muffs and trimmings, and in America also as

in England for stoles, muffs and trimmings, and in America also as recently as 1890. They are now mostly bought for Germany and the continent. Value 6d. to 1s. 6d.

MOUFLON.—Size 30×15 in. Is a sheep found in Russia and Corsica and now very little in demand, and but few are imported into Great Britain. Many Mongolian goats with the long hairs pulled out are sold as mouflon. Value 4s. to 10s. 6d.

Musk-Ox.—Size 6×3 ft. These animals have a dense coat of fine, long brown wool, with very long dark brown hair on the head, flanks and tail, and, in the centre, a peculiar pale oval marking. There is no other fur that is so thick, and it is eminently suitable for sleighing rugs, for which purpose it is highly prized in Canada. The musk-ox inhabits the north part of Greenland and part of Canada, but in very limited numbers. Value 10s. to 130s.

Musquash or Musk-Rat, Brown and Black Russian.—Size 12×8 in. A very prolific rodent of the amphibious class obtained from Canada and the United States, similar in habit to the English vole, with a fairly thick and even brown underwool and rather strong top dark hair of medium density. It is a very useful fur for

strong top dark hair of medium density. It is a very useful fur for men's coat linings and ladies' driving or motoring coats, being warm, durable and not too heavy. If the colour were less motley and the joins between the skins could be made less noticeable, it would be largely in demand for stoles, ties and muffs. As it is, this would be largely in demand for stoles, hes and mulis. As it is, this fur is only used for these smaller articles for the cheaper trade. It has, however, of later years been "unhaired," the underwool clipped very even and then dyed seal colour, in which way very useful and attractive garments are supplied at less than half the cost of the cheaper sealskins. They do not wear as well, however, as the pelt and the wool are not of a strength comparable to those of sealskin. With care however, such a garment lasts sufficiently long to warrant

and the wool are not of a strength comparable to those of sealskin. With care, however, such a garment lasts sufficiently long to warrant the present outlay. Value 5½d. to 1s. od.

There is a so-called black variety found in Delaware and New Jersey, but the number is very small compared to the brown species. They are excellent for men's coat linings and the outside of ladies' coats, for stoles, muffs, collars and cuffs. Value 10d. to 3s. 7d.

The Russian musquash is very small, 7×4 in., and is limited in numbers compared to the brown. Only a few thousands are imported to London. It is of a very pretty silvery-blue shade of even

ported to London. It is of a very pretty silvery-blue shade of even wool with very little silky top hair, having silvery-white sides and altogether a very marked effect. The odour, however, even after dressing is rather pungent of musk, which is generally an objection.

Value 4s. to 6s. 6d.

NUTRIA.—Size 20×12 in. Is a rodent known in natural history as the coypu, about half the size of a beaver, and when unhaired has not more than half, generally less, the depth of fur, which is also not so close. Formerly the fur was only used for hatters' felt, but with the rise in prices of furs these skins have been more carefully removed and—with improved dressing, unhairing and silvering processes—the best provides a very effective and suitable fur for ladies' coats, capes, stoles, muffs, hats and gloves, while the lower qualities make very useful, light-weighted and inexpensive linings for men's or women's driving coats. It is also dyed sealskin colour, but its woolly nature renders it less effective than the more silky musquash. They are obtained from the northern part of South America. Value 18, 6d, to 6s, 6d.

musquash. They are obtained from the northern part of South America. Value 1s. 6d. to 6s. 6d.

OCELOT.—Size 36×13 in. Is of the nature of a leopard and prettily marked with stripes and oblong spots. Only a few are now imported from South America for carriage aprons or mats. The numbers are very limited. Value 1s. to 2s. 6d.

OPOSSUM, AMERICAN.—Size 18×10 in. Is a marsupial, a class

with this exception not met with out of Australia. The underwool is of a very close frizzy nature, and nearly white, with long bluish grey mixed with some black top hair. It is only found in the central sections of the United States. About 1870 in England it was dyed dark brown or black and used for boas, muffs and trimmings, but until recently has been neglected on the continent. With, however, recent experiments in brown and skunk coloured dyes, it bids fair to become a popular fur. Value 2½d. to 5s. 6d.

Opossum, Australian.—Size 16×8 in. Is a totally different

nature of fur to the American. Although it has wool and top hair,

the latter is so sparse and fine that the coat may be considered as one of close even wool. The colour varies according to the district of origin, from a blue grey to yellow with reddish tones. Those from the neighbourhood of Sydney are light clear blue, while those from Victoria are dark iron grey and stronger in the wool. These animals are most prolific and evidently increasing in numbers. Their fur is pretty, warm and as yet inexpensive, and is useful for rugs, coat linings, stoles, muffs, trimmings and perambulator aprons. The worst coloured ones are frequently dyed black and brown. The worst colonied ones are frequently dyed black and brown. The most pleasing natural grey come from Adelaide. The reddest are the cheapest. Value 3\frac{1}{2}d. to 3s. 6d.

Opossum, Ringtailed.—Size 7 \times 4 in. Has a very short close and dark grey wool, some being almost black. There are but a few

thousands imported, and being so flat they are only of use for coat linings, but they are very warm and light in weight. Value 6d.

Opossum, Tasmanian (grey and black).—Size 20×10 in. Is of a similar description, but darker and stronger in the wool and larger. Besides these there are some very rich brown skins which were formerly in such request in Europe, especially Russia, that undue killing occurred until 1899, when the government stopped for a time the taking of any of this class. They are excellent for carriage aprons, being not only very light in weight and warm, but handsome.

Value 2s. 6d. to 8s. 6d.

OTTER, RIVER.—The size varies considerably, as does the underwool and the top hair, according to the country of origin. There are few rivers in the world where they do not live. But it is in the colder northern regions that they are found in the greatest numbers and with the best fur or underwool, the top hair, which, with the exception of the scarce and very rich dark brown specimens they have in common with most aquatic animals, is pulled out before the skins are manufactured. Most of the best river otter comes from Canada and the United States and averages 36×18 in. in size. Skins from Germany and China are smaller, and shorter in the wool. The colours of the under wools of river otters vary, some being very dark, others almost yellow. Both as a fur and as a pelt it is extremely strong, but owing to its short and close wool it is usually made up for the linings, collars and cuffs of men's coats. A large number of skins, after unhairing, is dyed seal colour and used in America.

Those from hot climates are very poor in quality. Value 28s. to 118s. OTTER, SEA.—Size 50×25 in. Possesses one of the most beautiful OTTER, SEA.—Size 50×25 in. Possesses one of the most beautiful of coats. Unlike other aquatic animals the skin undergoes no process of unhairing, the fur being of a rich dense silky wool with the softest and shortest of water hairs. The colours vary from pale grey brown to a rich black, and many have even or uneven sprinkling of white or silvery-white hairs. The blacker the wool and the more regular the silver points, the more valuable the skin. Sea otters are, unfortunately, decreasing in numbers, while the demand is increasing. The fur is most highly esteemed in Russia and China; in the latter country it is used to trim mandarins' state robes. In Europe and country it is used to trim mandarins' state robes. In Europe and America it is much used for collar, long facings and cuffs of a gentle-man's coat; such a set may cost from £200 to £600, and in all probability will soon cost more. Taking into consideration the size, it is not so costly as the natural black fox, or the darkest Russian sable, which is now the most expensive of all. The smaller and young sea otters of a grey or brown colour are of small value compared to the large dark and silvery ones. Value £10 to £220. A single skin has been known to fetch £400.

OUNCE.—See Leopard, above.
PERSIAN LAMBS.—See Lambs, above.
PLATYPUS.—Size 12×8 in. One of the most singular of furbearing animals, being the link between bird and beast. It has fur similar to otter, is of aquatic habits, being web-footed with spurs of a cock and the bill of a duck. The skins are not obtained in any numbers, but being brought over by travellers as curiosities and used for muffs, collars and cuffs, &c., they are included here for

used for muffs, collars and cuffs, &c., they are included here for reference. Value 2s. to 3s. 6d.

Pony or Tatar Foal.—Size 36×20 in. These skins are of comparatively recent importation to the civilized world. They are obtained from the young of the numerous herds of wild horses that roam over the plains of Turkestan. The coat is usually a shade of brown, sometimes greyish, fairly bright and with a suggestion of waviness. Useful for motor coats. Value 3s. to 10s. 6d.

Puma.—Size 4½×3 ft. Is a native of South America, similar to a lion in habits and colour of coat. The hair and pelt is, however, of less strength and only a few are now used for those two.

less strength, and only a few are now used for floor rugs.

5s. to ios.

RACCOON. -Size 20×12 in. Is an animal varying considerably in size and in quality and colour of fur, according to the part of North America in which it is found. In common parlance, it may be described as a species of wild dog with close affinity to the bear. The underwool is I to 1½ in. deep, pale brown, with long top hairs of a dark and silvery grey mixture of a grizzly type, the best having a bluish tone and the cheapest a yellowish or reddish-brown. A limited number of very dark and black sorts exist and are highly valued for trimmings. The very finest skins are chiefly used for stoles and muffs, and the general run for coachmen's capes and carriage rugs, which are very handsome when the tails, which are marked with rings of dark and light fur alternately, are left on. Raccoons are used in enormous quantities in Canada for men's

coats, the fur outside. The poorer qualities are extensively bought and made up in a similar way for Austria-Hungary and German These make excellent linings for coats or footsacks for open driving in very cold climates. The worst coloured skins are dyed black or brown and are used for British military bushies, or caps, stoles, boas, muffs and coachmen's capes. The best skins come from the northern parts of the United States. A smaller and poorer species in the bit South American and source for the contract of the states. inhabits South America, and a very few are found in the north of India, but these do not interest the European trade. From Japan a similar animal is obtained in smaller quantities with very good but longer fur, of yellowish motley light-brown shades. It is more often imported and sold as Japanese fox, but its resemblance to the fur of the American raccoon is so marked as to surely identify When dyed dark blue or skunk colour it is good-looking and is sold widely in Europe. Raccoon skins are also frequently unhaired, and if the underwool is of good quality the effect is similar to beaver It is the most useful fur for use in America or Russia, having a full quantity of fur which will retain heat. Value 10d. to 26s.

SABLE, AMERICAN and CANADIAN.—Size 17×5 in. The skins are

sold in the trade sale as martens, but as there are many that are of a very dark colour and the majority are almost as silky as the Russian sable, the retail trade has for generations back applied the term of sable to this fur. The prevailing colour is a medium brown, and many are quite yellow. The dyeing of these very pale skins has been for so long well executed that it has been possible to make very good useful and effective articles of them at a moderate price compared to Russian sable. The finest skins are found in the East Main and the Esquimaux Bay, in the Hudson's Bay Company's districts, and the poorest in Alaska. They are not found very far south of the northern boundary of the United States. The best skins are excellent in quality, colour and effect, and wear well.

Value 27s. 3d. to 290s.

SABLE, CHINESE and JAPANESE.—Size 14×4½ in. These are similar to the Amur skins previously referred to, but of much poorer quality and generally only suitable for linings. The very palest skins are dyed and made by the Chinese into mandarins' coats, in which form they are found in the London trade sales, but being overdressed they are inclined to be loose in the hair and the colour of the dye is not good. The Japanese kind are imported raw, but are few in numbers, very pale and require dyeing. Value 15s. to

SABLE, RUSSIAN.—Size 15×5 in. These skins belong to a species of marten, very similar to the European and American, but much more silky in the nature of their fur. They have long been known as "sables," doubtless owing to the density of colour to which many of them attain, and they have always been held in the highest esteem by connoisseurs as possessing a combination of rare qualities. The underwool is close, fine and very soft, the top hair is regular, fine, silky and flowing, varying from  $1\frac{1}{2}$  to  $2\frac{1}{2}$  in. in depth. In colour they range from a pale stony or yellowish shade to a rich dark brown, almost black with a bluish tone. The pelts are exceedingly fine and close in texture and, although of little weight, are very durable, and articles made of them produce a sensation of warmth immediately they are put upon the body.

The Yakutsk, Okhotsk and Kamschatka sorts are good, the last

being the largest and fullest furred, but of less density of colour than the others. Many from other districts are pale or yellowish brown, and those from Saghalien are poor in quality. The most valuable and those from Saghalien are poor in quality. The most valuable are the darkest from Yakutsk in Siberia, particularly those that have silvery hairs evenly distributed over the skin. These however are exceedingly scarce, and when a number are required to match for a large garment, considerable time may be necessary to collect them. This class of skin is the most expensive fur in the world, reckoning

alues by a square foot unit.

The Amur skins are paler, but often of a pretty bluish stony tone with many frequently interspersed silvery hairs. The quality too is lower, that is, the fur is not so close or deep, but they are very effective, particularly for close-fitting garments, as they possess the least appearance of bulk. The paler skins from all districts in Siberia are now cleverly coloured or "topped," that is, just the tips of the hair are stained dark, and it is only an expert who can detect them from perfectly natural shades. If this colouring process is properly executed it remains fairly fast. Notwithstanding the reported rights of the Russian imperial authorities over some regions with respect to these and other valuable fur bearing animals. respect to these and other valuable fur-bearing animals, there are in addition to the numbers regularly sent to the trade auction sales in London many good parcels of raw skins to be easily bought direct, provided price is not the first consideration. Value 25s. to 98os.

provided price is not the first consideration. Value 25s. to 980s.

SEAL, FUR.—Sizes range from 24×15 in. to 55×25 in., the width being taken at the widest part of the skin after preparation. The centre of the skin between the fins is very narrow and the skins taper at each end, particularly at the tail. The very small pups are of a beautiful quality, but too tiny to make into garments, and, as the aim of a good furrier is to avoid all lateral or cross seams, skins are of a good furfier is to avoid all lateral or cross sealing, sains are selected that are the length of the garment that is to be made. The most useful skins for coats are the large pups 42 in. long, and the quality is very good and uniform. The largest skins, known in the trade as "wigs," which range up to 8 ft. in length, are uneven and weak in the fur, and hunters do not seek to obtain them. The supply of the best sort is chiefly from the North Pacific, viz. Pribilof

Islands, Alaska, north-west coast of America, Copper Island of the Aleutian group near to Kamschatka, Robben Island and Japan. Other kinds are taken from the South Pacific and South Atlantic Oceans, around Cape Horn, the Falkland Islands up to Lobos Islands at the entrance of the La Plata river, off the Cape of Good Hope and Crozet Isles. With, however, the exception of the pick of the Lobos Island seals the fur of the southern sea seals is very poor and only suitable for the cheapest market. Formerly many poor and only suitable for the cheapest market. Formerly many skins were obtained from New Zealand and Australia, but the importation is now small and the quality not good. The preparation of seal skin occupies a longer time than any other fur skin, but its fine rich effect when finished and its many properties of warmth and durability well repay it. Value 10s. to 232s.

SEAL, HAIR.—There are several varieties of these seals in the seas

stretching north from Scotland, around Newfoundland, Greenland and the north-west coast of America, and they are far more numerous than fur seals. Generally they have coarse rigid hair and none possess any underwool. They are taken principally for the oil and leather they yield. Some of the better haired sorts are dyed black and brown and used for men's motor coats when quite a waterproof garment is wanted, and they are used also for this quality in China. The young of the Greenland seals are called whitecoats on account

The young of the Greenland seals are called whitecoats on account of the early growth being of a yellowish white colour; the hair is \$\frac{2}{3}\$ to 1 in. long, and at this early stage of their life is soft compared to that of the older seals. These fur skins are dyed black or dark brown and are used for military caps and hearth-rugs. Value 2s. to 15s. There are fewer hair seals in the southern than in the northern seas. Sheep.—Vary much in size and in quality of wool. Many of the domestic kind in central and northern Europe and Canada are used for drivers' and peasants' coat linings, &c. In Great Britain many coats of the home-reared sheep, having wools two and a half to five inches long, are dyed various colours and used as floor rugs, Skins with very short wool are dyed black and used for military saddle-cloths. The bulk, however, is used in the wool trade. The Hungarian peasants are very fond of their natural brown sheep coats. garian peasants are very fond of their natural brown sheep coats, the leather side of which is not lined, but embellished by a very close fancy embroidery, worked upon the leather itself; these garments are reversible, the fur being worn inside when the weather is cold. Chinese sheep are largely used for cheap rugs. Value of English

sheep from 3s. to 10s. SKUNK or BLACK MARTEN.—Size 15×8 in. The underwool is full and fairly close with glossy, flowing top hair about 2½ in. long. The majority have two stripes of white hair, extending the whole length of the skin, but these are cut out by the manufacturing furrier and sold to the dealers in pieces for exportation. The animals are found widely spread throughout North and South America. The skins which are of the greatest interest to the European trade are those from North America, the South American species being small, coarse and generally brown. The best skins come from Ohio and New York. If it were not for its disagreeable odour, skunk would be worth much more than the usual market value, as it is naturally the blackest fur, silky in appearance and most durable.

naturally the blackest fur, silky in appearance and most durable. The improved dressing processes have to a large extent removed the naturally pungent scent. The fur is excellent for stoles, boas, collars, cuffs, muffs and trimmings. Value is 6d. to 11s.

Souslik.—Size 7 in ×2½. Is a small rodent found in the south of Russia and also in parts of America. It has very short hair and is a poor fur even for the cheapest linings, which is the only use to which the skin could be put. It is known as follows when impacted. which the skin could be put. It is known as kaluga when imported in ready-made linings from Russia where the skins are dressed and worked in an inferior way. Value 1d. to 3d.

SQUIRREL.—Size 10×5 in. This measurement refers to the Russian and Siberian sorts, which are the only kind imported for

the fur. The numerous other species are too poor in their coats to attract notice from fur dealers. The back of the Russian squirrel has an even close fur varying from a clear bluish-grey to a reddishbrown, the bellies in the former being of a flat quality and white, in the latter yellowish. The backs are worked into linings separately, as are the bellies or "locks." The pelts, although very light, are tough and durable, hence their good reputation for linings for ladies' walking or driving coats. The best skins also provide excellent material for coats, capes, stoles, ties, collars, cuffs, gloves, muffs, material for coats, capes, stoies, uses, conars, cans, gloves, mans, hoods and light-weight carriage aprons. The tails are dark and very small, and when required for ends of boas three or four are made as one. Value per skin from 2½d. to 1s. 1d.

Tibet Lamb.—Size 27 × 13 in. These pretty animals have a long, very fine, silky and curly fleece of a creamy white. The majority are consigned to the trade auction sales in London ready dressed

and worked into cross-shaped coats, and the remainder, a fourth of the total, come as dressed skins. They are excellent for trimmings of evening mantles and for children's ties, muffs and perambulator aprons. The fur is too long and bulky for linings. Value per skin from 4s. 6d. to 8s. 6d.

TIGER.—Size varies considerably, largest about 10 ft. from nose to root of tail. Tigers are found throughout India, Turkestan, Chira, Mongolia and the East Indies. The coats of the Bengal kind are short and of a dark orange brown with black stripes, those from east or further India are similar in colour, but longer in the hair, while those from north of the Himalayas and the mountains of China are not only huge in size, but have a very long soft hair of delicate orange brown with very white flanks, and marked generally with the blackest of stripes. The last are of a noble appearance and exceedingly scarce. They all make handsome floor rigs.

Value of the Indian from £3 to £15.

", ", Chinese ", £10 to £65.

Vacuus is a registed short notified to \$2.

353

VICUNA is a species of long-necked sheep native to South America, bearing some resemblance to the guanaco, but the fur is shorter, closer and much finer. The colour is a pale golden-brown and the fur is held in great repute in South America for carriage rugs. supply is evidently small as the prices are high. There is scarcely a commercial quotation in London, few coming in except from private sources. 2s. 6d. to 5s. 6d. may be considered as the average value.

WALLABY.—See Kangaroo, above.

WALLAROO.—See Kangaroo, above.
Wolf.—Size 50×25 in. Is closely allied to the dog tribe and, like the jackals, is found through a wide range of the world,—North and South America, Europe and Asia. Good supplies are available from North America and Siberia and a very few from China. The best are the full furred ones of a very pale bluish-grey with fine flowing black top hair, which are obtained from the Hudson Bay district. Those from the United States and Asia are harsher in quality and browner. A few black American specimens come into the market, but usually the quality is poor compared to the lighter furred animal. The Siberian is smaller than the North American and the Russian still smaller. Besides the wolf proper alarge number of prairie or dog wolves from America and Asia are used for cheaper rugs. In size they are less than half that of a large wolf and are of a motley sandy colour. Numbers of the Russian are retained for home use. The finest wolves are very light weighted and most suitable for carriage aprons, in fact, ideal for the purpose, though lacking the strength of some other furs. lacking the strength of some other furs.
Wolves value

worves value 2s. 6d. to 64s.

Wolves ..., is. to 2s. 6d.

Wolvering.—Size 16×18 in. Is native to America, Siberia,
Russia and Scandinavia and generally partakes of the nature of a
bear. The underwool is full and thick with strong and bright top
hair about 2½ in. long. The colour is of two or three shades of brown
in one skin, the centre being an oval dark saddle, edged as it were with quite a pale tone and merging to a darker one towards the This peculiar character alone stamps it as a distinguished fur, in addition to which it has the excellent advantage of being the most durable fur for carriage aprons, as well as the richest in colour. It is not prolific, added to which it is very difficult to match a number of skins in quality as well as colour. Hence it is an expensive fur, but its excellent qualities make it valuable. The darkest of the least coarse skins are worth the most. Prices from 6s, to 37s.

WOMBAT, KOALA or AUSTRALIAN BEAR.—Size 20×12 in. Has

light grey or brown close thick wool half an inch deep without any top hair, with a rather thick spongy pelt. It is quite inexpensive and only suitable for cheap rough coats, carriage rugs, perambulator aprons and linings for footbags. The coats are largely used in western America and Canada. Value 3d. to 1s. 83d.

Preparing and Dressing.—A furrier or skin merchant must

possess a good eye for colour to be successful, the difference in value on this subtle matter solely (in the rarer precious sorts, especially sables, natural black, silver and blue fox, sea otters, chinchillas, fine mink, &c.) being so considerable that not only a practised but an intuitive sense of colour is necessary to accurately determine the exact merits of every skin. In addition to this a knowledge is required of what the condition of a pelt should be; a good judge knows by experience whether a skin will turn out soft and strong, after dressing, and whether the hair is in the best condition of strength and beauty. The dressing of the pelt or skin that is to be preserved for fur is totally different to the making of leather; in the latter tannic acid is used, but never should be with a fur skin, as is so often done by natives of districts where a regular fur trade is not carried on. The results of applying tannic acid are to harden the pelt and discolour and weaken the fur. The best methods for dressing fur skins are those of a tawer or currier, the aim being to retain all the natural oil in the pelt, in order to preserve the natural colour of the fur, and to render the pelt as supple as possible. Generally the skins are placed in an alkali bath, then by hand with a blunt wooden instrument the moisture of the pelt is worked out and it is drawn carefully to and fro over a straight, dull-edged knife to remove any superfluous flesh and unevenness. Special grease is then rubbed in and the skin placed in a machine which softly and continuously beats in the softening mixture, after which it is put into a slowly revolving drum, fitted with wooden paddles, partly filled with various kinds of fine hard sawdust according to the nature of the furs dealt with. This process with a moderate degree of heat thoroughly cleans it of external greasy matter,

and all that is necessary before manufacturing is to gently tap the fur upon a leather cushion stuffed with horsehair with smooth canes of a flexibility suited to the strength of the fur. After dressing most skins alter in shape and decrease in size.

With regard to the merits of European dressing, it may be fairly taken that English, German and French dressers have specialities of excellence. In England, for instance, the dressing of sables, martens, foxes, otters, seals, bears, lions, tigers and leopards is first rate; while with skunk, mink, musquash, chinchillas, beavers, lambs and squirrels, the Germans show better results, particularly in the last. The pelt after the German dressing is dry, soft and white, which is due to a finishing process where meal is used, thus they compare favourably with the moister and consequently heavier English finish. In France they do well with cheaper skins, such as musquash, rabbit and hare, which they dye in addition to dressing. Russian dressing is seldom reliable; not only is there an unpleasant odour, but in damp weather the pelts often become clammy, which is due to the saline matter in the dressing mixture. Chinese dressing is white and supple, but contains much powder, which is disagreeable and difficult to get rid of, and in many instances the skin is rendered so thin that the roots of the fur are weakened, which means that it is liable to shed itself freely, when subject to ordinary friction in handling or wearing. American and Canadian dressing is gradually improving, but hitherto their results have been inferior to the older European methods.

In the case of seal and beaver skins the process is a much more difficult one, as the water or hard top hairs have to be removed by hand after the pelt has been carefully rendered moist and warm. With seal skins the process is longer than with any other fur preparation and the series of processes engage many specialists, each man being constantly kept upon one section of the work. The skins arrive simply salted. After being purchased at the auction sales they are washed, then stretched upon a hoop, when all blubber and unnecessary flesh is removed, and the pelt is reduced to an equal thickness, but not so thin as it is finally rendered. Subsequently the hard top hairs are taken out as in the case of otters and beavers and the whole thoroughly cleaned in the revolving drums. The close underwool, which is of a slightly wavy nature and mostly of a pale drab colour, is then dyed by repeated applications of a rich dark brown colour, one coat after another, each being allowed to thoroughly dry before the next is put on, till the effect is almost a lustrous black on the top. The whole is again put through the cleaning process and evenly reduced in thickness by revolving emery wheels, and eventually finished off in the palest buff colour.

The English dye for seals is to-day undoubtedly the best; its constituents are more or less of a trade secret, but the principal ingredients comprise gall nuts, copper dust, camphor and antimony, and it would appear after years of careful watching that the atmosphere and particularly the water of London are partly responsible for good and lasting results. The Paris dyers do excellent work in this direction, but the colour is not so durable, probably owing to a less pure water. In America of late, strides have been made in seal dyeing, but preference is still given to London work. In Paris, too, they obtain beautiful results in the "topping" or colouring Russian sables and the Germans are particularly successful in dyeing Persian lambs black and foxes in all blue, grey, black and smoke colours and in the insertion of white hairs in imitation of the real silver fox. Small quantities of good beaver are dyed in Russia occasionally, and white hairs put in so well that an effect similar to sea otter is obtained.

The process of inserting white hairs is called in the trade "pointing," and is either done by stitching them in with a needle or by adhesive caoutchouc.

The Viennese are successful in dyeing marmot well, and their cleverness in colouring it with a series of stripes to represent the natural markings of sable which has been done after the garments have been made, so as to obtain symmetry of lines, has secured for them a large trade among the dealers of cheap furs in England and the continent.

Manufacturing Methods and Specialities.—In the olden times

the Skinners' Company of the city of London was an association of furriers and skin dressers established under royal charter granted by Edward III. At that period the chief concern of the body was to prevent buyers from being imposed upon by sellers who were much given to offering old furs as new; a century later the Skinners' Company received other charters empowering them to inspect not only warehouses and open markets, but workrooms. In 1667 they were given power to scrutinize the preparing of rabbit or cony wool for the wool trade and the registration of the then customary seven years' apprenticeship. To-day all these privileges and powers are in abeyance, and the interest that they took in the fur trade has been gradually transferred to the leather-dressing craft.

The work done by English furriers was generally good, but since about 1865 has considerably improved on account of the influx of German workmen, who have long been celebrated for excellent fur work, being in their own country obliged to satisfy officially appointed experts and to obtain a certificate of capacity before they can be there employed. The French influence upon the trade has been, and still is, primarily one of style and combination of colour, bad judgment in which will mar the beauty of the most valuable furs. It is a recognized law among high-class furriers that furs should be simply arranged, that is, that an article should consist of one fur or of two furs of a suitable contrast, to which lace may be in some cases added with advantage. As illustrative of this, it may be explained that any brown tone of fur such as sable, marten, mink, black marten, beaver, nutria, &c., will go well upon black or very dark-brown furs, while those of a white or grey nature, such as ermine, white lamb, chinchilla, blue fox, silver fox, opossum, grey squirrel, grey lamb, will set well upon seal or black furs, as Persian lamb, broadtail, astrachan, caracul lamb, &c. White is also permissible upon some light browns and greys, but brown motley colours and greys should never be in contrast. One neutralizes the other and the effect is bad. The qualities, too have to be considered the fulness of one, the flatness of the other, or the coarseness or fineness of the furs. The introduction of a third fur in the same garment or indiscriminate selection of colours of silk linings. braids, buttons, &c., often spoils an otherwise good article.

With regard to the natural colours of furs, the browns that command the highest prices are those that are of a bluish rather than a reddish tendency. With greys it is those that are bluish, not yellow, and with white those that are purest, and with black the most dense, that are most esteemed and that are the rarest.

Perhaps for ingenuity and the latest methods of manipulating skins in the manufacturing of furs the Americans lead the way, but as fur cutters are more or less of a roving and cosmopolitan character the larger fur businesses in London, Berlin, Vienna, St Petersburg, Paris and New York are guided by the same thorough and comparatively advanced principles.

During the period just mentioned the tailors' methods of scientific pattern cutting have been adopted by the leading furriers in place of the old chance methods of fur cutters, so that to-day a fur garment may be as accurately and gracefully fitted as plush or velvet, and with all good houses a material pattern is fitted and approved before the skins are cut.

Through the advent of German and American fur sewing-machines since about 1890 fur work has been done better and cheaper. There are, however, certain parts of a garment, such as the putting in of sleeves and placing on of collars, &c., that can only be sewn by hand. For straight seams the machines are excellent, making as neat a seam as is found in glove work, unless, of course, the pelts are especially heavy, such as bears and sheep rugs.

A very great feature of German and Russian work is the fur linings called rotondes, sacques or plates, which are made for their home use and exportation chiefly to Great Britain, America and France.

In Weissenfels, near Leipzig, the dressing of Russian grey squirrel and the making it into linings is a gigantic industry, and is the principal support of the place. After the dressing process the backs of the squirrels are made up separately from the under

and thinner white and grey parts, the first being known as squirrelback and the other as squirrel-lock linings. A few linings are made from entire skins and others are made from the quite white pieces, which in some instances are spotted with the black ear tips of the animals to resemble ermine. The smaller and uneven pieces of heads and legs are made up into linings, so there is absolutely no waste. Similar work is done in Russia on almost as extensive a scale, but neither the dressing nor the work is so good as the German.

The majority of heads, gills or throats, sides or flanks, paws and pieces of skins cut up in the fur workshops of Great Britain, America and France, weighing many tons, are chiefly exported to Leipzig, and made up in neighbouring countries and Greece, where labour can be obtained at an alarmingly low rate. Although the sewing, which is necessarily done by hand, the sections being of so unequal and tortuous a character, is rather roughly executed, the matching of colours and qualities is excellent. The enormous quantities of pieces admit of good selection and where odd colours prevail in a lining it is dyed. Many squirrellock linings are dyed blue and brown and used for the outside of cheap garments. They are of little weight, warm and effective, but not of great durability.

The principal linings are as follows: Sable sides, sable heads and paws, sable gills, mink sides, heads and gills, marten sides, heads and gills, Persian lamb pieces and paws, caracul lamb pieces or paws, musquash sides and heads, nutria sides, genet pieces, raccoon sides or flanks, fox sides, kolinski whole skins, and small rodents as kaluga and hamster. The white stripes cut out

of skunks are made into rugs.

Another great source of inexpensive furs is China, and for many years past enormous quantities of dressed furs, many of which are made up in the form of linings and Chinese looseshaped garments, have been imported by England, Germany and France for the lower class of business; the garments are only regarded as so much fur and are reworked. With, however, the exception of the best white Tibet lambs, the majority of Chinese furs can only be regarded as inferior material. While the work is often cleverly done as to matching and manipulation of the pelt which is very soft, there are great objections in the odour and the brittleness or weakness of the fur. One of the most remarkable results of the European intervention in the Boxer rising in China (1900) was the absurd price paid for so-called "loot" of furs, particularly in mandarins' coats of dyed and natural fox skins and pieces, and natural ermine, poor in quality and yellowish in colour; from three to ten times their value was paid for them when at the same time huge parcels of similar quality were warehoused in the London docks, because purchasers could not be found for them.

With regard to Japanese furs, there is little to commend them. The best are a species of raccoon usually sold as fox, and, being of close long quality of fur, they are serviceable for boas, collars, muffs and carriage aprons. The sables, martens, minks and otters are poor in quality, and all of a very yellow colour and they are generally dyed for the cheap trade. A small number of very pretty guanaco and vicuna carriage rugs are imported into Europe, and many come through travellers and private sources, but generally they are so badly dressed that they are quite brittle upon the leather side. Similar remarks are applicable to opossum rugs made in Australia. From South Africa a quantity of jackal, hyena, fox, leopard and sheep karosses, i.e. a peculiarly shaped rug or covering used by native chiefs, is privately brought over. The skins are invariably tanned and beautifully sewn, the furs are generally flat in quality and not very strong in the hair, and are retained more as curiosities than for use as a warm covering.

Hatters' Furs and Cloths and Shawls.—The hat trade is largely interested in the fur piece trade, the best felt hats being made from beaver and musquash wool and the cheaper sorts from nutria, hare and rabbit wools. For weaving, the most valuable pieces are moltair taken from the angora and vicuna. They are limited In quantity and costly, and the trade depends upon various sorts of other sheep and goat wools for the bulk of its productions.

Frauds and Imitations.—The opportunities for cheating in the fur trade are very considerable, and most serious frauds have been perpetrated in the selling of sables that have been coloured or "topped"; that is, just the tips of the hairs stained dark to represent more expensive skins. It is only by years of experience that some of these colourings can be detected. Where the skins are heavily dyed it is comparatively easy to see the difference between a natural and a dyed colour, as the underwool and top hair become almost alike and the leather is also dark. whereas in natural skins the base of the underwool is much paler than the top, or of a different colour, and the leather is white unless finished in a pale reddish tone as is sometimes the case when mahogany sawdust is used in the final cleaning. As has been explained, sable is a term applied for centuries past to the darker sorts of the Russian Siberian martens, and for years past the same term has been bestowed by the retail trade upon the American and Canadian martens. The baum and stone martens caught in France, the north of Turkey and Norway are of the same family, but coarser in underwool and the top hair is less in quantity and not so silky. The kolinski, or as it is sometimes styled Tatar sable, is the animal, the tail of which supplies hair for artists' brushes. This is also of the marten species and has been frequently offered, when dyed dark, as have baum and stone martens, as Russian sables. Hares, too, are dyed a sable colour and advertised as sable. The fur, apart from a clumsy appearance, is so brittle, however, as to be of scarcely any service whatever.

Among the principal imitations of other furs is musquash, out of which the top hair has been pulled and the undergrowth of wool clipped and dyed exactly the same colour as is used for seal, which is then offered as seal or red river seal. Its durability, however, is far less than that of seal. Rabbit is prepared and dyed and frequently offered as "electric sealskin." Nutria also is prepared to represent sealskin, and in its natural colour, after the long hairs are plucked out, it is sold as otter or beaver. The wool is, however, poor compared to the otter and beaver, and the pelt thin and in no way comparable to them in strength. White hares are frequently sold as white fox, but the fur is weak, brittle and exceedingly poor compared to fox and possesses no thick underwool. Foxes, too, and badger are dyed a brownish black, and white hairs inserted to imitate silver fox, but the white hairs are too coarse and the colour too dense to mislead any one who knows the real article. But if sold upon its own merits, pointed fox is a durable fur.

Garments made of sealskin pieces and Persian lamb pieces are frequently sold as if they were made of solid skins, the term "pieces" being simply suppressed. The London Chamber of Commerce have issued to the British trade a notice that any misleading term in advertising and all attempts at deception are illegal, and offenders are liable under the Merchandise Marks Act 1887.

The most usual misnaming of manufactured furs is as follow:-

Musquash, pulled and dyed Sold as seal. Nutria, pulled and dyed Sold as seal. Nutria, pulled and natural Sold as beaver. Rabbit, sheared and dyed Sold as seal or electric seal. Otter, pulled and dyed. Sold as seal Marmot, dyed . Sold as mink or sable. Fitch, dyed Sold as sable. Rabbit, dyed Sold as sable or French sable. Sold as sable, or fox, or lynx. Hare, dyed Musquash, dyed Sold as mink or sable. Sold as skunk. Wallaby, dyed . White Rabbit . Sold as ermine. Sold as chinchilla. White Rabbit, dved Sold as fox, foxaline, and other similar names. White Hare, dyed or natural . Goat, dved Sold as bear, leopard, &c. Dyed manufactured articles of all kinds. Sold as "natural." White hairs inserted in foxes Sold as real or natural furs. and sables. Kids . Sold as lamb or broadtails. American sable . Sold as real Russian sable. Sold as sable.

The Preservation of Furs. For many years raw sealskins

have been preserved in cold storage, but it is only within a recent period, owing to the difficulty there was in obtaining the necessary perfectly dry atmosphere, that dressed and madeup furs have been preserved by freezing. Furs kept in such a condition are not only immune from the ravages of the larvae of moth, but all the natural oils in the pelt and fur are conserved, so that its colour and life are prolonged, and the natural deterioration is arrested. Sunlight has a tendency to bleach furs and to encourage the development of moth eggs, therefore continued exposure is to be avoided. When furs are wetted by rain they should be well shaken and allowed to dry in a current of air without exposure to sun or open fire.

Where a freezing store for furs is not accessible, furs should be well shaken and afterwards packed in linen and kept in a perfectly cool dry place, and examined in the summer at periods of not less than five weeks. Naphthalene and the usual malodorous powders are not only very disagreeable, but quite useless. Any chemical that is strong enough to destroy the life in a moth egg would also be sufficiently potent to injure the fur itself. In England moth life is practically continuous all the year round, that is, as regards those moths that attack furs, though the destructive element exists to a far greater extent during spring and summer.

Comparative Durability of Various Furs and Weight of Unlined Skins per Square Foot.

The following estimates of durability refer to the use of fur when made up "hair outside" in garments or stoles, not as a lining. The durability of fur used as linings, which is affected by other conditions, is set forth separately. Otter, with its water hairs removed, the strongest of fur for external use, is, in this table, taken as the standard at roo and other furs marked accordingly:-

The Precious Furs.

2 100 1 70010 100 1 101		
en in de la companya de la companya La companya de la companya de	Points of Durability.	<sup>1</sup> Weight in oz. per sq. ft.
Sable Seal Fox, Silver or Black White Ermine Chinchilla Sea-otter (for stoles or collars)	60 75 40 20 25 15	2 1/2 3 3 3 1 1/4 1/2 4 1/4

The Less Valuable Furs.

ottoria anti ete di la constata di constat	Points of Durability.	Weight in oz. per sq. ft.
Sable "topped," i.e. top hairs coloured ,, tinted, i.e. fur all coloured Baum Marten, natural , tinted Stone Marten Nutria Musquash, natural , water hairs removed, sheared and seal finished	50 65 45 40 27	2 1/21/21 2 2 2 2 2 2 3 3 4 1 4 3 1 4 3 1 4 3 1 4 3 1 4 1 4 1
Skunk Mink Lynx, natural ,, tinted black Marmot, tinted Fox, tinted black ,, blue Opossum Otter (with water hairs) ,, (water hairs removed) Beaver (water hairs cut level with fur) (water hairs removed). Moleskin Persian Lamb Grey Broadtail Caracul Kid	70 70 70 25 20 10 25 20 37 100 95 90 85 7 65 30	32 2 3 3 3 4 3 4 3 1 3 3 2 2 3 3 3 2 2 3 3 3 4 3 4 3 5 4 5 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6
Squirrel Hare Rabbit	15 25 5 5	3 I 43 4 1 4 1 4 1 4 1 4 1 4 1 4 1 4 1 4 1

Stout, old-fashioned boxcloth is almost the only cloth that (after a soft, heavy lining has been added to it) affords even two-

## Quantities of Fur needed, in Square Feet.

The "Paris Model" figure is the basis of these estimates for ladies' garments, the standard measurements being height 5 ft. 6 in., waist 23 in., bust 38 in.

and the state of the state of the state of the state of	Sq.	Ft.	
( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( )	approx	kimate	<del>:</del> ).
Straight stole ½ length (just below the waist line	) .	2 <sup>3</sup>	•
Straight stole 1 length (just below the knee)		23	
Stole, broad enough at the neck to cover the	ton of	0.4	
arm # length	top or	<b>E</b>	
The same, full length (to hem of skirt).	• •	5	1
Eton jacket, without collar	•	12	
	• •	13	
Plain cape, 15 in. long	• •	62	. ,
Deep cape, 30 in. long		15	
Full cape with broad stole front, \(\frac{3}{4}\) length \(\frac{1}{2}\).	• •	15	
Inverness cape (to knee)		25	
Double-breasted, straight, semi-fitting coat, cov	vering		i
hips		16	
Double-breasted sacque jacket, 36 in. long, full sl	leeves	20	. 1
Same, 30 in. long		18	
Same, 22 in. long		15	
Long, full, shawl cape with points at back and	front		
well below knee.	110110,	T E	
Shorter shawl cape	•	16	
Matarian and distance 3 fametic	•		
Motoring or driving coat, \( \frac{3}{4} \text{ length.} \)	• ' ''•	22	• •
Motoring or driving coat, full length	• •	27	. :

## Weight and Durability of Furs for Men's Coat Linings.

Otter with the water hairs removed, the strongest fur suited for linings, is here taken as the standard.

to gas de vise es diference pour inscriber e e o songleis da la mode es en es pris es gran	Points of Durability.	Weight in oz. per sq. ft.
Otter (the water hairs removed) Beaver Mink Sealskin Raccoon Persian lamb or astrachan Sable Musquash Nutria Grey Opossum Wallaby Squirrel Hamster Rabbit	90 90 75 75 70 65 55 40 40 30	31 1 6 3 1 6

Durability and Weight of Linings for Ladies' Coats or Wraps.

Sable gills, the strongest fur suited for ladies' linings, is taken as

nest in the entry of the first of the second	Points of Durability.	Weight in oz. per sq. ft.
Sable gills Sable Sable paws Ermine Squirrel back Squirrel heads Squirrel lock Hamster Rabbit	100 85 64 57 50 36 21 10	2 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1

Durability and Weight of Motoring Furs made up with Fur outside. Otter with the water hairs, the strongest fur suited for motoring garments, is taken as the standard.

		Weight in oz: per sq. ft.
Sealskin, marble. "Hair Sealskin" (tinted) with water hairs (a special variety of seal).	30	3; 3;
Raccoon	35	43 28

thirds as much protection against cold as does fur. It weighs 4.273 oz. per sq. ft. more than the heaviest of coat-furs, and is so rigid as to be uncomfortable, while the subtileness of fur makes it "kind" to the body.

Durability and Weight of Furs for Rugs and Foot-sacks.

		-						Points of Durability.	Weight in oz. per sq. ft.
Wolverine	-							100	ő
Bear (black or	brow	'n	natu	ıral	) .	٠.		94	7
Bear (tinted bla	ick)							88	$7\frac{1}{2}$
Beaver								88	4
Raccoon							٠.	77	$4\frac{1}{2}$
Opossum	•, ,	•						61	3
Wolf								50	$6\frac{1}{2}$
Wolf				٠.		2		27	$4\frac{1}{2}$
Australian Bear	٠.						•	16	6
Goat		•		٠.				ii	4 6

Wolverine, the strongest fur suited for rugs and foot-sacks, is taken as the standard.

For a rug about 20 to 25 sq. ft. of fur are needed, for a foot-sack 14½.

(W. S. P.)