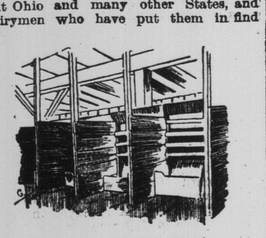
A MODEL COW STALL.

A Full and Complete Description, With Two Illustrations, of the Celebrated Scott Design.

In the first place, the stable has enough light in it to take a photograph of it in a quarter of a minute's exposure. The picture from which the first illustration was taken was exposed after cows were put on pasture and all bedding removed and stalls swept out, and by the way, are kept so through the entire summer for milking, night and morning.

This stall is not only in common use in this immediate locality, but throughout Ohio and many other States, and dairymen who have put them in find



SCOTT COW STALLS, FIG. 1.

they make no mistake, for the reason that they give to the cow so near perfect comfort and absolute cleanliness that their introduction has made the keeping of cows more of a pleasure than before using them.

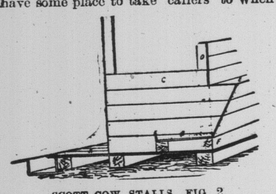
While Fig. 1 gives a perfect rear view, Fig. 2 will explain more clearly the side section and measurements, etc.

The platform, A, is made of one-inch oak, doubled and joints broken, with a fall of two inches and is six feet six inches long, for a cow weighing 1,000 pounds, and should be correspondingly longer or shorter as the weight of the cow may require.

This feature may be provided for by placing the fencing, in front of the cow, nearer toward the ditch or further away or sometimes the ditch is run at an angle or an offset at one end, but the former is by all means the most satisfactory.

The feed trough, B, is raised by running two 2x3 stringers the entire length of the stable, making the trough 18 inches wide and six inches deep in front of the cow. The stalls are three feet three inches wide from centres, and partitions four feet high and three feet six inches long at C. The posts, D, are five feet high made from 2x3 studding, and toenailed in the corner of each feed box at F and 1x3 lath nailed to them for the cow to eat hay through, and to keep her standing back to her ditch.

The hay rack at E is 18 inches wide and three feet deep to F, and is open with a six inch thwart so that grain, ensilage or any cut feed readily falls through into feed box. The ditch is 18 inches wide and nine inches deep on platform side and seven inches at rear and is made absolutely water tight. The latter feature, along with the broken joints on the platform, always insures good sanitation, as with every particle of manure and liquid voiding where absorbents and deodorizers can be applied puts the stable in shape so that its caretaker can keep it pure and sweet with little effort, and have some place to take callers to when



SCOTT COW STALLS, FIG. 2.

showing his best cows without having to prefix and suffix the visit with an apology.

Any farmer, I think, can erect this stall with the use of a good saw, hatchet, jack plane and square, at a trifling cost, and when once completed am positive that it will be a great source of pride to the dairyman who has it in his barn.

After four years of use, and keeping cows confined from four to five months, each winter, day and night, am able to say that it is a perfect stall and not only keeps the cows perfectly clean, but have not seen a stall that gives the cow so much freedom for her head and body.

We tie with ordinary tie chains, and by the use of a large ring or a strap around the second bar in front, can be moved from one side of stall to the other. —Geo. E. Scott, Ohio, in Hoard's Dairyman.

Why Women Excel in Farm Dairies.

P. B. Crosby speaks a great truth when he says: Not long ago, while visiting a friend, the cows were driven up to water just at dinner time. The master asked who had told the boy to drive the cows up, and the mistress said that she had. The cows, she said, had to stay in the field all day without any water, and the milk was falling off in consequence, and she had told the boy to bring them up every day to water at dinner time. I instantly thought of several innovations on this farm inspired by the mistress of it, all of which were to the betterment of the dairy, and it occurred to me that there would be very many better dairies in this country if the better half of the farm were to do more managing. A man usually has not the patience to attend to all the little details of dairying, and it is just the same little details that make for success. But a woman has the requisite patience and when she has a mind to manage the dairy it is far better if she does it. I know of one man who taught his wife all she knows about butter making, and she now makes a better grade of butter than he did, because she has the patience to attend to all the small items that he in his lordly manner skipped.—Dakota Field and Farm.

What High Grade Means.

Farmers are now beginning to see the difference between the precious and the vile. They are paying $20 and $25 and sometimes even higher prices for a high grade calf, discriminating in favor of those to the extent of about ten dollars per head. In short, on the present market in country places the difference made by intelligent feeders between a high grade calf and a common calf is from five to ten dollars. This, then, is the measure of the value of a good bull. If a man has ten cows, he can afford to give $100 for a good bull, knowing that he will pay him from $50 to $100 each year and be worth when sold fat from $70 to $90.—Wallace's Farmer.

DUCK BREEDING.

Extracts From G. H. Pollard's Address at the Rhode Island Poultry School—How He Succeeded.

Let us begin with the location of the plant, and that may be almost anything that you can get. While water is one of the almost necessary points, there are many leading breeders who do not have water running through their yards and do not consider it necessary. In establishing a plant, if you could select just what you wanted I should advise you to choose a place with a good, sizable pond or running stream of water, for in that way you would gain in the fertility of the eggs.

The Pekin duck we advocate altogether because of the deep keel. In the improved type the breast line should be nearly parallel with the back and the breast should be nearly the same length as the back. The old line bird is something the shape of a Bartlett pear. Of course it is possible with the old type of bird to get a heavy weight, but the weight does not come in the right place, it is mostly back of the legs, which is where most of the waste comes, and there is no frame to build on. In selecting birds for breeding I would choose preferably birds that only weigh from six to seven pounds apiece alive, and mate them carefully with medium-sized drakes. We used to mate five ducks to one drake, but now I should like to mate up in single pens one drake with five, six or seven females.

We feed them lightly until about the 1st of November, when we generally mate them. I am trying not to force them this year, thinking that it destroys the vitality of the birds and the fertility of the eggs, and so we are feeding what we call "harmless food"—largely clover, perhaps one part clover and three parts bran and two parts corn meal, and we have not fed any beef scraps yet. It is not the question how many eggs they lay, but what we get out of them. I have

THE PEKIN DUCK.

never kept a very accurate account of the number of eggs, but I do know that they do not lay anything like 140 eggs, such as the records we often see printed in the papers. As a rule we get less than 100 rather than over. I think that 90 is nearer what we really get. Now if we get only 90, it is a great point to get 50 good eggs, rather than so many poor ones. It is not the point to get a large number of eggs, but to get fertile ones. By forcing we destroy the fertility, yet the eggs are quite profitable if it does not take too much out of the breeding stock to get them. I would prefer not to have them begin to lay before some time in February. The first few eggs laid will not be very valuable, they are almost always infertile; perhaps the first two or three eggs from each breeder, and the first machinefuls do not average more than 40 per cent. fertile. If you hatch 25 per cent. of them it will be doing well. If you try the eggs you will see that 35 or 40 per cent. comes nearer the average. After starting to hatch with hens and machines you will probably find that you average more with hens than machines, but if you average in either case 50 per cent. you will be doing well, and even 40 per cent. will be doing fairly well. From the 40 per cent. you will naturally expect to raise 85 to 90 ducklings, and that is all that you can expect, and 75 per cent. will often cover those raised by experts.

We feed the old breeding ducks, before we begin to force them for eggs, about a third clover and sometimes plain hay and the rest bran and meal. The idea is to fill them up with something bulky and when they begin to lay we begin with five per cent. of beef scrap and work up gradually, until in a week or so we will be giving them ten or 12 per cent. We keep water before them all the time. At a season of the year when it is possible we let them have it for swimming.

Use Clean Road Metal Only.

A principle learned from MacAdam was that "broken stone, pressed and compacted, would cohere together and, by the mutual friction of its parts, bear and distribute heavy pressures as well as if it actually were the smooth and solid slab it seems." But when earth is mixed with the stone the friction is reduced by nearly one-half, the material is less compact and firm and is much less capable of bearing heavy loads. Moisture affects the volume of clay. Roads in which it is used rut badly in wet weather, even though they are very thick, while the thinner roads in which it is not used, but in which the stones are pressed together by their own angles through adequate rolling, remain firm and smooth. Road metal should be clean and free from clay. The use of clay is attractive, because, with it, light rolling seems to give a good smooth surface, but this is only temporary and is unsatisfactory and expensive in the end.—Good Roads.

Keep the Best.

Before disposing of the spring pigs make sure that you have selected enough of the best ones for breeding purposes the coming season. I know it is tempting sometimes to sell off the largest ones and think the smaller ones will come on all right with a little extra care, but it is not wise to do this every year. Plump, solid hogs are the kind for brood sows, and this selection is made after studying the herd all summer. One thing it pays to do is to select those that are easily kept. Some hogs consume twice as much food as others and are not in one-half as good flesh the year around as the light eater.

Lichens on Fruit Trees.

Heavy, shaggy growths of lichens are often seen on fruit trees. We are often asked if they do the trees any harm. This question has never been satisfactorily answered, though scientists assure us that the lichens are not truly parasitic, and do not feed on the substance of the trees to which they are attached. Still, when they grow as thickly as we often see them, they are sure to harbor insects and spores of fungi, and they always make an orchard look untidy and disagreeable. They can be removed by scraping, or they can be killed or their growth prevented by spraying with Bordeaux mixture.

SCRUB SIRES.

The Farmer's Advocate Calls for Their Perpetual Banishment From the Herd—The Arguments Advanced.

Never in the history of our country was the necessity for improving the quality of our beef stock more apparent than at the present time. Never was competition so keen and aggressive in the markets of the world or the taste of buyers and consumers so fastidious. Never were there so many countries so ready to cater to the British market, which is and will be our chief dependence as an outlet for our live stock and its products, and it is plain that our only hope of being able to hold our own in the race for supremacy, or even of equality, lies in our producing goods of a quality equal to the best, and in order to do this with any reasonable degree of profit to the producer we must avail ourselves of all the means at our disposal to produce them at the lowest possible cost. To this end we must have a class of stock that will give a fair return for the food consumed.

The complaint comes from all parts of the Dominion that our beef cattle as seen in the markets of our own country and of Great Britain are sadly deficient in quality and finish, and compare unfavorably with those from the United States and other countries with which we have to compete. That the complaint is too well founded few will deny. If Canada is to hold her own in this competition, immediate and prompt action must be taken to remove the imputation and the fact. The cause is patent to all observers. It lies mainly in the fact that too large a proportion of our farmers are failing to take advantage of their opportunities to improve the quality of their cattle by the use of pure-bred bulls of good quality. It is difficult to understand how a class of farmers such as we have in Canada, progressive as a rule in adopting improved methods and in keeping abreast of the times, should actually have retrograded as they seem to have done in the matter of producing a creditable class of beef cattle. Our dairymen have manifested a progressive spirit in improving their cattle from a dairy standpoint and along dairy lines by the only means by which such improvement can be made—that is, by using only pure-bred sires of proper type, weeding out inferior cows, and feeding liberally. The example published in our last issue, of the magnificent results of the application of these means in the herd of Mr. Tillson, by which the average yearly milk production of a herd of 55 cows has been brought up to 11,660 pounds, and of butter 476 pounds each, is a striking exemplification of the soundness of this principle. We are well aware that breeders of the beef breeds of cattle freely charge the introduction of the special dairy breeds with the crime of degrading the general cattle stock of the country. There is much less truth in this charge than many are disposed to believe. Very few of the cattle offered on our markets show any marks of the dairy breeds, and very few steers of these breeds are raised. Bulls of the special dairy breeds are being used by only a small proportion of the farmers of Canada, a very great majority of whom favor the beef breeds, and believe, perhaps rightly, in the beef grade or general purpose cow as being best suited for the purpose of the general farmer. The cow which will give a fair flow of milk and will produce calves which fed on her skimmilk and properly cared for can be made to fill the bill for export beeves at two and a half to three years old will always, and properly, meet the approbation of the bulk of our farmers. But the question is, are the men of this great army who profess to believe in the merits of this class of cattle doing their share in the work of raising the standard of the class? There can be but one answer. They know they are not. The fact is patent to all disinterested observers that while they have been standing at the street corners cursing the dairy breeds for spoiling our cattle, they themselves have been allowing their own to degenerate by using inferior and low-grade bulls, with the result that instead of keeping pace with the progressive spirit of the age, they find themselves fooling with cattle which cannot be compared with those their fathers owned nearly half a century ago. The writer well remembers some 30 years ago that when a first-class bull was brought into a neighborhood it was not unusual for the owner to have a list of from 75 to 100 of his neighbors' cows on his books at a service fee of two dollars, enough in many cases to repay in one or two seasons the cost of the bull. The result, as we all know, was that good, big, breedy-looking general purpose cows were common, and plenty of well-bred steers could be found for feeding, such as were a pleasure to look upon and a satisfaction to feed. But how is it to-day, and how has it been in the last ten or 15 years? We know many cases where men have brought high-class bulls into a district, and standing them at the same fee, have not been patronized to the extent of more than a beggarly dozen of cows in a year. And it was not because of the existence of dairy bulls in the district, for only few patronized them, while the men who profess to believe in the beef breeds and the general purpose cow were breeding from low-grade bulls of their own raising or inferior ones whose services were held at fifty cents to insure a calf. The fact may as well be faced at first as at last, that the dairy breeds are here to stay, for the reason that they are paying their way and making good money for their owners all the year round, when properly cared for; and there is no class of farmers in the Dominion standing on safer ground than the dairymen, but there is ample room in this great country for both the beef breeds and the dairy breeds—aye, and for the general purpose cow — and those whose tastes do not run to dairying as a specialty have just as large a field for the cultivation of their tastes and proving themselves benefactors of their country by improving the class of cattle they fancy by the adoption of intelligent methods. The man who undertakes to look up a few steers for feeding, or the man who feeds them, needs no argument to convince him of the vital importance of this subject. There is pleasure and satisfaction as well as profit in feeding the well-bred, broad-backed, square-ended bullock which pays for his feed and gives a good balance on the right side of the account, while the bony, three-cornered, ill-bred brute eats more, makes less gain in weight, makes a low-grade class of beef, and discounts the price of the whole bunch when a buyer comes round.

We believe it is safe to say that the difference in the selling value of these two classes in our best market at 3¼ years old is at least $20 a head, while the cost of producing the lower-priced animals has been greater than that of the other, which means a loss of millions of dollars on the cattle marketed in Canada every year, and this loss falls mainly on the men who raise them. A corresponding loss is sustained on all the cattle of this class kept upon the farms of the Dominion, and however much we may deplore the fact, it is certain that the remedy is not to be found in whining over the decadence of our cattle nor in harping on "the tune that the old cow died of," but by every man asking himself the question, "What am I doing to improve the situation?" and by carrying into practice a resolve to begin at home by improving his own stock by the use of the best sires within his reach, and joining in a vigorous crusade against scrub sires.

It seems almost incredible that men will so carelessly neglect their own direct interest by the use of mongrel sires, when good pure-breds can be easily purchased or their services secured in nearly every locality at the reasonable fees now current. The small extra initial outlay is a mere trifle, when the certain resulting advantages are considered. Let us have done with this "scrub" folly—and let the new leaf be turned over this very season. —London Farmer's Advocate.

COOP FOR EARLY CHICKS.

One That Is Desirable for the First Breeds of the Year.

The cut shows a desirable coop for very early chickens. The coop is long and sloping and has a hotbed sash hinged to

FIG. 1.—COOP WITH GLASS TOP.

FIG. 2.—INSIDE OF COOP.

the top. The higher half of the coop has a tight bottom with slats at its outer edge, as shown in Fig. 2. There is no bottom to the rest of the coop, and the lower end has a hinged door, and is also covered with one inch mesh of wire netting.

When very cold, the door can be shut up tight and the chicks will have a warm run on the ground outside the slats. When it is warmer the end door can be dropped, giving a protected run, but plenty of fresh air. The hen can be let out into this run when desired. A cloth can be thrown over the glass at night when the weather is cold.—Orange Judd Farmer.

A SILO.

Report of the Commissioner of Agriculture and Dairying Recommends It.

A silo is a convenience which every dairy farmer should have, says the report of the Dairy Commissioner. It need not be an expensive structure. It requires to be strong enough to hold corn fodder when cut into lengths of from one-half to one inch. It should be fairly close so as to exclude the air after the ensilage has settled.

The main features are strength to resist the outward pressure of its contents, exclusion of air by the construction of the sides, and a fair depth of holding capacity, in order to permit the ensilage to settle into a compact mass. Sufficient strength of sides can be obtained in most silos by the use of 2x10-inch or 2x12-inch studs, placed from 18 inches to two feet apart. A clay or earthen floor is most economical, and as good as any that can be put in. The inside of the walls of the silo may be finished by a single lining of lumber, nailed to the studs horizontally. The lumber should be tongued and grooved and dressed on the inside. If each alternate board be allowed to extend at the corners, so as to make a lock-joint, that will give additional strength to the structure. The corners of the silo, on the inside, should be filled by the use of a board or plank ten inches wide, set on end. The triangular space behind it should be filled with sand or sawdust. I consider that studs 2x10-inch or 2x12-inch, with one ply of sound tongued and grooved lumber, nailed horizontally on the inside, are sufficient for an efficient preservation of the ensilage. Additions to that method of construction may be advantageous in a few cases for convenience.

To build one with the least outlay of cash, the farmer who has some standing timber may get out timbers hewn on one side. These may be put in a mow in the barn and lined on the inside with one thickness of lumber tongued and grooved and nailed on horizontally. This big bin, or silo, should be constructed with the corners interlocked by every second board passing through and being nailed on the corner post. That effectually prevents the spreading of the silo at the corners.

If a portion of the ensilage around the sides becomes frozen, that is more an inconvenience than a loss. It should be mixed with the warm ensilage, from the middle of the silo, before it is offered or fed to the cattle.

Beauty in Evergreen Trees.

When not overdone the planting of evergreens on the lawn around the house can be made to add very materially to the appearance. The mistake is too often made, however, of not allowing for growth, and in a few years after planting the yard has a crowded appearance that, to say the least, detracts from appearances. By a little care in allowing room for growth this may easily be avoided.

Evergreens, rather more than most varieties of deciduous trees, gain much from transplanting, for the reason that they are usually of scant root and are not inclined to throw out small fibrous roots. Transplants aid veeery materially in the growth and formation of fibrous roots, acting the same with the roots as cutting back the top helps to form a more dense head. On this account evergreens may often be transplanted two or three times before set in the place they is to occupy permanently. By care in transplanting the evergreen forms a thick compact root growth near the stem of the tree, and when set to grow permanently these help materially to secure and maintain a thrifty growth.

The Home Orchard.

The home orchard and fruit garden should contain a sufficient number of plants, vines and trees to grow an abundance of fruit for family use. Beginning with strawberries, it should also contain raspberries, currants, gooseberries, grapes, cherries, quince, pears, plums and apples, and a number of varieties of each, ripening in regular succession, so as to keep up a constant supply of good fruit the whole year. It would be a matter of causing health and pleasure if carried into practice.

JACKETS AND CRAVATS.

New and Effective Styles For the Street.

Jackets of white or bright cloth are worn with elegant walking costumes of white, pale gray or beige cloth, the jacket forming a strong contrast. French blue, red and bright green are used, also purple and a bright plum color, and the effect is very pleasing.

A jacket in bolero form at the back is double breasted in front, and the fronts extend below the waist to form a sort of square basque. The side which laps over is cut in square tabs, and the collar and cuffs are also crenelated. It is made in bright colors and lined with contrasting silk.

Toreador cravats of velvet or light silk are much worn with jackets and boleros. They are trimmed with ruches or plaitings

BODICE TRIMMING.

of silk, mousseline de soie or lace, and the collar is plaited horizontally. There are also straight, flat cravats, descending to the waist, with a row of little fancy buttons or studs. Lace cravats are smaller, and real lace is employed for them when they are to accompany formal costumes, as they usually do. Another variety of neckwear is made of guipure over satin, which is a new departure in cravats.

The cut given today shows a new corsage trimming. It consists of a plaited point of mousseline de soie, crossed by two bows of plaited mousseline de soie. A flat collar and two tabs of white embroidered satin are trimmed with little ruches. The collar and cravat are of plaited mousseline de soie, the collar having two tabs like those at the front of the plaited chemisette.

JUDIC CHOLLET.

SPRING MATERIALS.

New and Attractive Goods For Spring and Summer.

Challies are shown in great variety among the new importations of spring goods. The satin stripe, wide or narrow, predominates both in plain and figured challies. Plain deep red, with the satin stripe, is extremely pretty, and there are also white and pale toned grounds, with a colored design running along the wide spaces between the stripes. In challies without satin stripes rather a novel idea is shown. This consists of a white polka dot effect, each dot being outlined with black. Of course the dots appear on a colored ground and are seen in two varieties. In one they are all of the same size and are regularly disposed; in the other they are of varying sizes and are sprinkled about at random.

The new plaids are nearly all large. A very attractive line is shown in which the

WALKING COSTUME.

goods, which are rather thick, but soft, have a plushlike surface, which softens and blends the colors, which are chiefly of a rather subdued quality.

Among wash goods barred and corded lawns in solid color are shown, the yellow ones being particularly pretty. There are also extremely fine and delicate printed designs on dimity, exactly suited to frocks for very little children.

The picture illustrates a walking costume of dark blue cloth. The skirt has three scant circular flounces edged with black soutache. The long tunic or redingote is also edged with soutache and trimmed with it in front in the military fashion, being fastened with groups of three pearl buttons. The blouse bodice is trimmed to match, and the black satin belt fastens in front with a bow. The high straight collar is adorned with fancy braiding, as are the revers of the jacket.

JUDIC CHOLLET.

Charles Reade.

It is related that in his early days Reade said, "I am like Goldsmith and others—I shall blossom late," and, true enough, he was almost 40 years of age before his life work began. He deliberately sets out in his diary at this time the plan that he intended to follow in the writing of fiction. He proposed never to guess where he could know, to visit all the places and experience all the sensations he intended to describe, to understand all that was possible of the hearts and brains of the people he intended to portray; in a word, to be a writer of truths instead of a writer of lies. "Now I know exactly what I am worth," he says. "If I can work the above great system, there is enough of me to make one of the writers of the day. Without it—no, no."—Gentleman's Magazine.

HOME DRESSMAKING.

Hints as to the Construction of Fashionable Gowns.

The home dressmaker may find it useful to know that when bodices are laced instead of being buttoned or hooked the eyelet holes through which the cords are passed should be made in a narrow space between two small whalebone strips. The whalebone on each side of the row of eyelets prevents the cord from wrinkling the bodice. The places for the bones may be

DINNER GOWN.

prepared, but the bones need not be slipped in place until the eyelets are made, as it is much easier to make the latter before the material is stiffened. Very small, round whalebones are most often used for the stiffening, as they adapt themselves more readily to the curves of the figure than do the flat ones, which will only bend backward and forward.

Princess evening gowns are nearly always laced. It is necessary to line them with firm material, so that they may be closely drawn in around the figure; for a princess gown which does not fit properly is an utter failure. The lining, like the outside, must have no seam at the waist, and the seams where the pieces of the bodice are joined should be well nicked in in many places and pressed open.

Sleeveless bodices are made very high under the arms, and the armhole is kept as small as possible. Around the edge of the decolletage a cord is run in, which is drawn tight after the bodice is put on to keep the edge close against the shoulders.

The dinner gown of which a picture is given is of black and white striped satin with a chine border, the breadths of the skirt being bias. Below the vandykes at the foot are trimmings of black chantily and black ostrich plumage. The bodice is composed mainly of the bordering of the satin, and has a guimpe of white tulle over lilac gauze. Black ostrich plumage edges the decolletage and decorates the striped sleeves, which are of elbow length. A jeweled buckle fastens the belt, and black lace is arranged across the shoulders.

JUDIC CHOLLET.

WRAPS.

Jackets and Mantles of the Latest Style.

The outer garment is now meant as much for beauty as for use and when intended for carriage or calling wear is often very elaborate. For the fashionable promenade the long redingote, finished with a circular flounce, probably takes the lead. It fits closely at the back, but may be either tight or loose in front, and is lined throughout with silk. Occasionally the back is box plaited, the plaiting being held in at the waist by a strap. There may be a pelerine or revers.

CHILD'S COAT.

Mantles and jackets of fur are expensive and fashionable luxuries. The most convenient form of fur jacket is the Eton, which fits tightly and has long sleeves and a high collar, but terminates at the waist. It is warm and at the same time smart looking. There is usually trimming of a different kind of fur, although this is not an invariable rule.

For carriage wear every sort of fanciful wrap is tolerated and broche and embroidered silks and rich velvets are employed in profusion. One model is in the empire style, with a high girdle under the arms. Another of pansy velvet has a watteau back.

A picture is given of a simple and attractive coat for a little girl of 5 years. It is of blue cloth and has a short, plain waist, upon which is mounted a box plaited skirt. The skirt is plain in front, and the coat closes at the left side, three large buttons adorning the edge of the bodice part. The full sleeves are gathered into a band, and the wrists and the little pelerine are bordered with fur.

JUDIC CHOLLET.