THE REALM OF FASHION.

New York Dye.—The Pink Indian is to many ladies is the undoubted favorite of the hour. The Syrian Bay Station model illustrated has many

EVENING DRESSING GOWN.

advantages and reduces the labor for those who, while it is simple in its richness. At those it is worn open with the fronts rolled back to form pointed revers, and the flower collarette at the throat, but when desired it can be fastened up close as shown in the sketch and made to meet across the bosom. The model is made from black chariot with soft tucked sleeves, and collar beaded on the inside with velvet and tabs of white gold braid, and is shown in combination with smoked pearl buttons.

The pearls are cut with eight facets and fit snugly to the figure. The bell is seamless and finished in a rounded fall the extension below the waist and is pulled to the points by wide silken cords that extend well back to form sash tacks and give a double tapering effect to the figure. The sleeves are two-seamed long, without being tight, and are set in modified puff shape or showing the fullness is tipped on and off with ease. A

GIRL'S DRESS COSTUME.

the neck in the military collar known as the Raleigh, with pointed ends that can be tucked over close at left front as preferred.

To cut this jacket for a woman of medium size four yards of material twenty-one inches wide, two yards forty-four inches wide, or one and five-eighth yard fifty inches wide will be required.

Girl's Blouse Costume.

The blouse in combination with a pearl skirt makes a simple costume such worn and much used by little ones. The tucked model illustrated is the large drawing is made from silk and serge with bands of black velvet edged with narrow gilt braid and a shield and collar of glistening gendered red panne.

The skirt is cut in three pieces, the gored front and circular sides, and is joined to a body lining that is sewed and closed at the centre back. The shield portion is lined into the lining and the standing collar is sewed to the neck so that all closes together. The blouse is separate, with shoulder and under-arm seams, and opens at the front, where it is provided with buttons and buttonholes. Both back and fronts are plain across the shoulders, but slightly full at the waist, where the blouse provides over the belt. The right side laps over the left in double-breasted style, the rounded points being decorated with gold buttons, and the neck is finished with a deep collar that is round at the back and square at the front. The sleeves are two-seamed and finished with turn-over flare cuffs.

To cut this costume for a girl of eight years of age five yards of material twenty-seven inches wide, two and three-eighth yards forty-four inches wide, or two yards fifty inches wide, with five-eighth yard eighteen inches wide for shield and collar, will be required.

GIRL'S BLOUSE COSTUME.

Love Locks in Mode.

Cute little ringlets are beginning to appear in the forehead of the young housewife. They are not curls but little twists of soft hair, making a half circle or three-quarter circle. Infinite pains are taken to make a "love lock" stay in place. One is enough for the forehead. Sometimes you see two, one running forward from each side. Never attempt to cultivate more than two for

BLOUSE WITH LAPELON STOCK.

desired, the plain portion only can be used, or the stock can be made of a contrasting color and worn with various waists.

To cut this blouse for a woman of medium size four and one-eighth yards of material eighteen inches wide, or two and a half yards thirty-two inches wide, with a quarter of a yard of lace velvet and a quarter of a yard of silk for facing portion of stock and tie, will be required.

THE NEW TIME SYSTEM

ONE THING THAT MAY COME WITH THE TWENTIETH CENTURY.

A Plan That Would Simplify Matters greatly—Use of a Universal Day and Prime Meridian—Many Details Considered—Voting to Watch.

The new century will bring about many changes, but perhaps none of such everyday importance to the people as a method of timekeeping. One of the most practical results will be that soon at Greenwich will be 12 o'clock all over the world. At present each day is spread over forty-eight and in some instances five hours in different places. With the new system it will have a beginning and end within twenty-four hours all over the globe. The hours of one station and clocks for all the world are to twenty-four. It would seem odd for a white to order theatre carriages at half-past twenty-two o'clock or half-past ten.

The slogan reads "A quarter-past thirteen" today by the policeman in the "Bon Bullets" will become the correct way of indicating "a quarter past one." But, after all, this will only be a reinstatement of what was in vogue in the back as 1884, when the time for all "stands" rested on the Greenwich Public Railroad was first pushed to take valuable Standings to twenty-four.

What Should Constitute Time.

The fixing of a universal period according with its privy with the subsequent work, in railways and telegraphs in close individual had to such particular complications to model and commercial affairs, to street in chronology, in litigation in connection with succession to property, berkshire notices, contracts, etc. The present inflection of time are readily demonstrated by setting points in four watches about ninety degrees apart, for instance, in one, Austin, Newfoundland and Alaska. On Sunday at midnight in Austin it is noon in Newfoundland, and in two distant days, etc. Number one Monday. To explain the apparent contradictory statement that Austin being west of Alaska the one time there at midnight in Japan would be 6 p. m. Sunday while in Alaska being east of Japan, it would be 6 a. m. on Monday. As it is on Sunday in Austin it must be Sunday noon in Newfoundland, and as 6 a. m. on Monday in Alaska it must be Monday noon where degrees further east it, i. e. in Newfoundland also. Thus it will be seen by moving time both east and west from a given point to its antipodes, the clock on the one hand becomes twelve hours slower, and on the other hand twelve hours faster. And, therefore, it follows as already stated, that when it is Midnight on Sunday in Japan, as previously the same moment it is noon at Newfoundland on two different days, namely, Sunday and Monday.

Simplifying Problems.

It is only another application of the complicated method of time reckoning which gave rise to the following incident. A telegraphic message dated "Sunday, 1:05 a. m., Wednesday," was received in London at 11:31 p. m. on Tuesday. The clerk very naturally exclaimed "Why the message was sent 48 hours ago!" The same perplexing problem has been presented by inquiring is not suspended from the sun, and to the cry a man who is going the day and time as a town, rolls eastward beneath him. The answer, "12 o'clock noon, Monday," is given. Presently another town comes under the sun. The man says the same question and receives the same reply. Yet, of course, it must always be noon, the town being immediately beneath the sun. Now comes the question, "When will the man in the car first receive the answer '12 o'clock noon, Tuesday?'" The solution is found in the fact that in traveling across the Pacific from west to east one day has to be reproved before reaching the American coast. If, for example, the correction be made on Saturday, July 1 there will be two Saturdays in the same week and two days of the month dated July 1.

It is this variation of time, the which forms the pivotal point of the story, "Around the World in Eighty Days," in which Mr. Fogg, who wagered at his London club that he could go around the world and be back at the club in eighty days, so nearly lost his bet. He had forgotten this difference of a day, and thought that he had accomplished his journey seventy-four hours too late.

Order out of Chaos.

Does any one ask, "What is going to straighten this out and bring about order out of the existing chaos?" The answer is by simply putting into operation the results of the deliberations of the international meridian conference which met in Washington at the invitation of President Arthur in October, 1884, for the express purpose of establishing a prime meridian and a universal day. This matter was freely discussed at the time by astronomers and mathematicians, and the hope was everywhere expressed that the change would be effected on January 1, 1901. At any rate it does not seem possible that the adoption of the new system can be deferred very long after the commencement of the twentieth century.

Cross Timekeepers.

Even with our present defective system of time-reckoning, consider how many advantages we enjoy over the ancients. In the sixth century before Christ the sun dial, which is supposed to have been invented by the Chaldeans. Was introduced into Greece, probably by the Babylonians. It was only a pillar or staff, and was not graduated so as to indicate the passage of any particular fraction of a day. When it cast a shadow six feet long, the hour for bathing had arrived, and supper was eaten when the shadow became twelve feet long. Simple as it was, it seemed to satisfy the needs of that primitive race. It could not, of course, be used indoors, nor was it of any use on a cloudy day. It was merely a crude timekeeper, and could not even be used for checking off certain brief periods. To know such was the "Clepsydra," or water clock, was invented, and there seems to have been the best of its might. Fifty years before the Christian era a clepsydra was erected in the "Tower of the Winds" in the market place at Athens. A running stream kept the water in an upper vessel at a constant level. The discharge passed a disk in a lower vessel. On the disk there was an indicator or hand, which as it rose, turned over an alphabet wheel and so gave a time reference, very like a dial. This was the public timepiece of Athens, and its indications could always be compared with those of the sun dial on the prime of the communal building up which it was mounted. At the top of the roof was a weather vane in the form of a Triton, who pointed with his trident toward the prevailing wind. Thus the double purpose of a local observatory and a weather bureau was accomplished.

Crooked Clocks.

A similar device has been found in use among the Malay Bantams, where a perforated cocoanut shell floating in a bucket of water permits the bath to sink gradually. When the shell becomes full an hour is recorded. In northern India a copper bowl is used, and as the bowl is filled the attendant strikes the hour upon the hour. In China the same idea prevails, but with this difference, the vessel is filled and then to drop the water is allowed to run out.

Leaving dates to one side for the moment, the ancients were by no means so much behind us in the simplicity of their methods for correcting them. We might still be judged about with such confusing conditions as would make it hard for a man to know whether he should get up or go to bed.—Washington Star.

Overcrowding and Tuberculosis.

E. A. Kempf declares that lack of air and light, intemperance and underfeeding help to create in the body the best soil for the invasion, growth and development of the tubercle bacilli. These conditions predominate in many of the city tenements. He then speaks of the great danger attending the careless disposal of tuberculous sputum. Dusty and soil factors concentrate; model tenements built on good soil with proper drainage will go far to stamp out this disease. Overcrowding of all institutions as well as dwellings should be avoided. The creation of schools of hygiene would give useful and healthful employment to a number of men, as well as rendering the regimen more healthful.—Medical Record.

Loss Sustained in Great Britain.

In 100 Britons you will find only forty-three light-complexioned against fifty-one dark. The other six are red-haired

FARM AND GARDEN.

Worked Young Farm Stock.

There is money to correct loss, but much of it is raising and selling breeders and exhibition birds. The two are governed entirely by the same conditions. The first principle in both branches is the proper raising of the chick. The only difference is in the selection and pairing of the stock, and this slight difference opens up the world for a market for your surplus stock and eggs for hatching once you have proved their value.

Treating Potatoes.

Where potatoes grow very rank and tend wholly toward development of tops, beneficial results can sometimes be secured by trimming off about one-third of the growth. This will check the development above ground and tend to force the setting of tubers. Of course, this trimming or pruning must be done before the time for the potatoes to set. The growth of tomato vines can be checked by pinching off the ends of the main branches and removing some of the smaller ones when the plants are comparatively young. Apple trees may be pruned at any time of the year, but preferably in autumn or early winter when the trees are dormant.

How to Winter Bees.

One of the most satisfactory ways is keeping them in a cellar. The hives are raised from the floor and ranged in tiers with the hives somewhat high, or they are made. Each hive is raised from the floor of the stand by small blocks three-eighths of an inch thick. All front entrances are left wide open so as to give free ventilation. The window doors to the hives are replaced by chaff cushions four inches thick, above which are placed strips of wood to prevent the cushions coming in contact with the hives above. Its hives packed with wooden the cushion is provided and bees are liable to smothered. Hives packed with chaff may be left out of doors, if the ventilation is good, but they are liable to become wet and so a cellar seems the best will suffice.

Tying Up Fruit Trees.

The illustration shows how a tree is tied to a stake so that it may be pruned. It consists simply of a board placed on two legs with an upright at each end, to which the supports are fastened by the side of an inverted V, are placed by the side of an inverted V, are placed by the side of an inverted V, are placed by means of a small wedge, c. The tree is then tied firmly to place and filling made easy. The width of the horse, A, is of course, governed by the size of the tree. Have the legs of the horse long enough so that the operator can stand upright.—Rural New Yorker.

THE FRAME AND HOW IT CAN BE CONSTRUCTED.

Spring Corn Fodder.

We think that there is no better way to save corn fodder than to cut and shock it at or near maturity. Running the sled corn cutter between the rows, and cutting two rows at a time, is perhaps the best way to put it. Corn fodder is excellent feed for all kinds of stock if properly saved. It should not be too ripe, nor yet so green as to permit damage to the ear by mold and rot. The stocks should begin to turn brown and most of the ears should be glazed or hardening. The period at which corn fodder can be properly cured is necessarily a late being limited as it is by the maturity of the crop and the condition of the weather. A few frosts will destroy corn fodder, especially if followed by rain, as they cause the blades to become blackened and fall off. As we have said, corn fodder is a good cattle feed for all stock, if well cured and cared for. It should be broken and not under cut, or placed in stacks just as soon as it is sufficiently cured, so as to thresh just as little as possible. Before the shredding of at least that part that is to be fed in the stalls. Shredded fodder is much more easily handled, does not require so much shed room, and the refuse is readily disposed of. The greatest drawback to this is the fact that most men use shredded fodder mainly from custom, give assistance. However, if one is convinced to put only dry fodder through the shredder this will not occur. That the shredding of fodder is slowly winning its way in spite of all we do not doubt. At present the cattle exhibitor derives many from having corn and fodder husked and shredded by machine. But with better machinery the work will be cheap, and the benefits are such as to insure a wide adoption of the methods.—A. S. Kissinger, Agricultural Epitomist.

Feeding Sheep Cattle.

A bulletin of the National Live Stock Association says that the quantity of rather feed on the ranges is a perplexing one. The dry, hot summers, augmented by numerous forest fires, not only played havoc on the summer ranges, but damaged thousands of acres of winter range and reduced the water supply for irrigation and the growing of alfalfa. It can be said that, providing the winter is not severe, there is reasonably good prospects of present holdings of stock pulling through on the present range and hay supply. The latter commodity is going to rule relatively some higher than last year, as the crop is not up to the average.

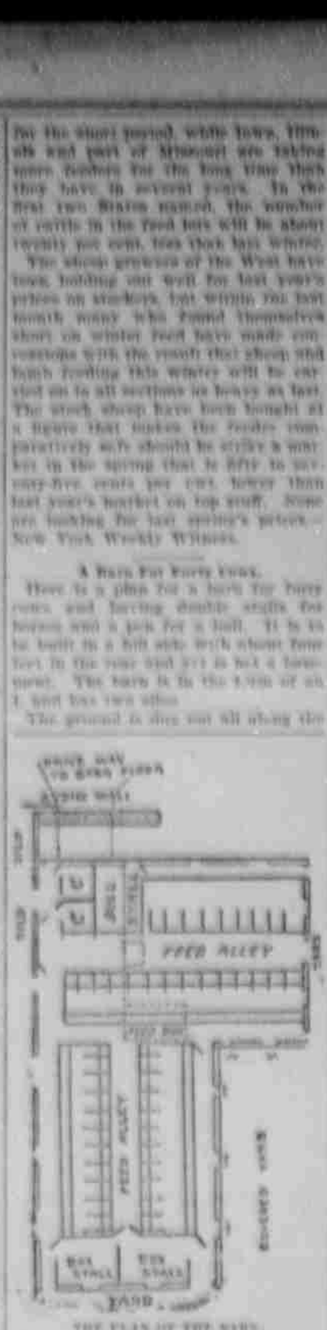
Feeders of cattle in the corn belt have within the past few weeks given evidence that they will not be going long-time feeding, rather purely in the 120 day feed. Kansas, Nebraska and Missouri will be more especially noted for the short period, while Iowa, Illinois and part of Missouri are taking more feeders for the long time than they have in several years. In the first two States named, the number of cattle in the feed lots will be about twenty per cent. less than last winter.

The sheep growers of the West have been holding out well for last year's prices on muttons, but within the last month many who found themselves short on winter feed have made concessions with the result that sheep shall have feeding this winter will be carried on to all sections to leave as last. The stock sheep have been bought at a figure that makes the feeder comparatively safe should he strike a winter in the spring that is fifty to seventy-five cents per cwt. lower than last year's basket on top stuff. Some are looking for last winter's prices.—New York Weekly Witness.

A Barn for Forty Cows.

Here is a plan for a barn for forty cows and having double width for horses and a pen for a bull. It is to be built in a hill side with about four feet in the rear and yet is not a basement. The barn is in the form of an L and has two silos.

The ground is dug out all along the



THE PLAN OF THE BARN.

back and end, which are supported by a stone wall. The barn is then built in the usual way, of timber. The silos are placed as shown, with a bridge over the open space, so that the silage may be forced by a silo right on to the main floor, and from thence be distributed to the cows, below through feed shoots in the main floor. Every convenience has been studied. The height of basement is nine feet and there are plenty of windows for light and ventilation; the basement floor is of cement, and is fully drained, the drainage from the gutters being carried to a manure shed in the covered yard. The dotted lines show the two doors above for feed and litter. The water from the main roof is run into a cistern at the side of the driveway and the water from the front is collected in a cistern near the yard, where cattle may be watered when desired. If desired drinking bowls may be fitted in the stalls and supplied with water from a pipe made to connect with each of the bowls, by the simple turning of one cock under the driveway. The two pens C.C. are for young calves and if I raised a limited pen, or two, may be made under the driveway at the end of the open passage. The whole coat is estimated at from $1200 to $1500.

Eggs For Market.

Where eggs are raised for market as a business, it is necessary to employ the best of care in keeping and shipping them. Eggs that are guaranteed fresh every day and shipped regularly to certain dealers always pay the best. The top prices are obtained in this way, even if only a case can be collected. Crates should be labeled so as to signify that the eggs are fresh daily, and then it is wise to stamp every egg with your mark. Buyers soon learn to know your stamp. It may be made simply out of rubber, and the process of stamping each egg is small. In large cities grocers and dealers are nearly always willing to handle such eggs, and it will pay sometimes to ship a crate or two direct to them every day. Any negligence in putting stale eggs in the crate would, of course, ruin everything. The stamp on the eggs should be the mark of an absolutely fresh egg, and not a single specimen should be allowed to creep in.

I have found it most profitable to keep enough layers in winter to make it worth while shipping eggs daily. Nothing less than a crate or case of thirty dozen eggs will pay to ship by express and break. It takes a big poultry yard to secure that number of eggs daily, but by cautioning with neighbors it should not be difficult. Two or three could raise a portion of the eggs and make up the full crate, and send them to market by express. More money would be obtained in this way than by any other method.

If there are no neighbors to combine with the eggs may be kept three or four days and still be truthfully "fresh eggs." To do this, however, they should be taken from the nest regularly and packed in layers of sawdust in a cool place. The temperature should be nearly to the freezing point all the time. It is best that cause eggs to decay. Store them in the living rooms where the temperature is normal, and at the end of four days they will be stale eggs. Store them in the cellar or like where the temperature is very low, and they will be nearly as fresh as the day they were laid four or five days afterward. The packing in the sawdust tends to keep out the air, and the low temperature prevents inside changing. Eggs kept this way, and shipped twice a week, should sell for the highest prices, and they will invariably pass the candle or any other test successfully.—Annie C. Webster, in American Cultivator.

Wellington, New Zealand, has acquired the local tramways.

Good Roads Notes

Who Has Roads Are Thriving.

With a single exception the farmer of Illinois is exceedingly fortunate in his situation. He is none of a top than farmers in many other states. He plows a belt of exceeding fertility, and is generally out of debt. He has the most approved farm machinery, good stock, and usually a good well to pump the water and grind fuel for them. He looks with complacency upon his co-worker on the rent hills of New England, who is trying to make a living on the farm in spite of nature that has done so little for him, and so much for his Western brother. Here the picture changes. The New Englander is a free man. He can drive to town over a good road any day in the year, he can sell his produce whenever the price suits him; he can go to church; the highest schools of village and town are accessible to his children; he enjoys a friendly intercourse with his neighbors; he keeps in touch with the great outside, ever-changing world.

With the 15th of November comes the winter of discontent to the haulers of the Western prairie. He knows that for the next five or six months he is to be the beyond vassal of King Mud; that he works at a time to make such a wheel. He will be to a large degree isolated from the world. Let it be remembered that the ground freezes ordinarily after the November rains, when the roads are badly cut up. This leaves them rough and almost impassable. He must sell his produce, and when the market is right, but when the roads will permit. He has produce that the city wants, and is ready to pay a good price for, but he cannot deliver it. When the roads are bad prices are generally at the low, as the supply is short on account of the roads. When the roads improve prices usually go down, owing to heavy shipments and over supply.

The inability to take advantage of the market is costing the farmers of Illinois, at the lowest estimate, two cents upon every bushel of grain they raise. In no nothing of the monotonousness and discomfort of being mud-bound, and the extra expense of hauling produce to market over poor roads.

The reports of the Bureau of Agriculture show that the cost of hauling farm produce to market in Central Europe over the splendid roads found there, is from five cents to eight cents per ton per mile, the average being about six and one-half cents; while over dirt roads in America the expense of the same service is from twenty-four cents to twenty-six cents per ton per mile. Over three times the cost in Europe.

Ninety-nine per cent. of all farm products moved by railroad, express and steamship companies is first hauled in wagons. It often costs more to move products six miles from the farm to the railroad than it costs to freight it 200 miles to the city market.

The Maryland Geological Survey, composed of experts of high standing has made an exhaustive study of the good roads problem as related to that State, and their report shows that the present wagon roads of that State cost the people $2,000,000 more per year than it would with uniformly good hard roads, and this amount of money is a dead loss each year. This represents $3.75 for every man, woman and child in the State.

The secretary of the Farmers' National Congress estimates that wagon transportation of the United States reaches the enormous sum 600,000,000 tons for an average of eight miles, or 4800 million tons transported for one mile, at an average cost of twenty-five cents per ton, making the amount equal to three-fourths of the national debt, or over $15 for every man, woman and child in the United States. Two-thirds of this sum would be saved if this country had such county roads as France, Belgium, England and Germany.

An eminent authority on agriculture says that the farmers in any community having hard roads which will enable them to market their crops any day in the year, can by watching the market and taking advantage of good prices, gain from three cents to five cents a bushel on his grain, and one-half to one cent a pound on his hogs, over and above what he can ordinarily get when, for weeks at a time, he is mud-bound, and cannot deliver his crop nor keep in touch with the markets. He goes further and says: "This means an increase of the cash profits on the farm of from seventy-five cents to $1 per acre. There can be no doubt that good, hard, every day-in-the-year roads are worth $100 to $200 per mile for every quarter section tributed by them."

Bad roads work a double injury. When the dirt roads are good, the teams are steadily employed in the fields. When the dirt roads are worn, be stopped in the fields the roads are of an impassible.

Bad roads are the most expensive and aggravating bar for the farmer has to bear. They require twice the horse power, twice the time, and only one-half the load as compared with good roads.—The States' Duty.

Farmers and Good Roads.

H. H. Gross, field expert of the Department of Agriculture, made the principal address before the Good Roads Congress in Chicago, saying in part:

"The influence of hard roads upon farm property is to add $5 in value for every $1 spent on the roads. This is true, because, given hard roads so the farmer can market his crops when the market is right instead of harvesting them when the roads are right, he can get two, three, four or five cents a bushel more for his grain. Good roads are coming. The indications are that the Legislature which will meet at Springfield this winter will consider an adequate good-roads law, and that we will soon be making hard roads on a large scale.