AGRICULTURAL.

A Good Forage Crop.

Dwarf Essex rape is a good forage crop for beef cattle, but is hardly desirable for milch cows, as it is liable to taint the milk. It is primarily a forage crop for sheep and hogs. It would be better to plant corn for cows or sow millet or some kind of small grain like oats or rye, providing the droughty season comes early in the summer. If it comes late in the fall, corn planted early will give all the green feed needed for the dairy animals.

How to Make Axle Grease.

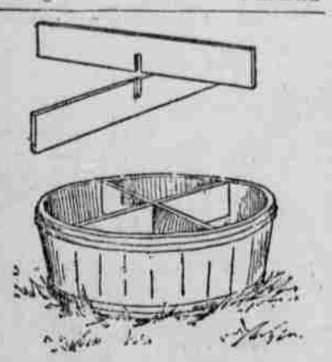
A very good axle grease is made by mixing 1 gallon of petroleum, 4 ounces of tallow, 4 ounces of palm oil, 6 ounces of plumbago and 1 ounce of soda. Heat to 180 degrees Fahrenheit for an hour or more and then cool. Another axle grease is made by boiling 4 gallons of water with ½ pound of Scotch soda and a 10-pound mixture of palm oil and tallow in any proportion which will make the grease of the desired hardness. Heat to boiling and then stir until the mixture is cooled down to 60 or 70 degrees.

Weeds Among Beans.

After beans have blossomed it is not best to work among them, especially if the weather and soil be wet, and there should be no cultivation while the leaves are wet with rains or dew. Hence the early cultivation of beans should be thorough, so as to allow them to ripen before the weeds smother them. It is not best to plant beans on land that is very rich in nitrogenous plant food, because such land is very weedy. Soil of moderate fertility with a dressing of phosphate and potash will make a good rain crop, while on the richer land without the mineral fertilizer, there will be only a large growth of haulm and leaves.

An Out-of-Door Feed Trough.

Where several hogs are quartered in an orchard or other pasture they must be fed out-of-doors. To keep each one from crowding and fighting his neighbor when eating, make such a trough as is shown in the illustration. The bottom part of a barrel is sawed off and two narrow strips of board are fitted together and nailed firmly into the trough, as in the drawing. A flour barrel can be made to answer this temporary purpose, but a trough from a stouter barrel will prove more lasting.



PARTITIONED FEED TROUGH FOR HOGS.

Eggs and Early Molting.

Early molters make good winter layers, and it is safe to say that if poultry do not finish shedding feathers before cold weather sets in, they will be likely to postpone laying until spring, but such ones will prove early spring layers, and continue laying all summer, which will be full compensation for the winter's inactivity.

As with the matured fowls, so with the late hatched pullets; they seldom begin laying until spring. Pullets hatched in March will probably molt in November or December, just at the time when eggs are bringing a good price. The April hatched pullets will be the ones to depend upon for eggs during the winter. Leghorns lay perhaps the earliest of the breeds commonly grown. Some will lay at the age of five months, the Asiatics and larger kinds generally at seven to ten months. Food containing oil, such as linseed meal, meat scraps, etc., with a mixture of ground oats, wheat, is useful to hasten the feathering-out process. Poultry should be well cared for during this critical process; should be housed in clean, dry quarters and fed liberally. Some lose their plumage so gradually that the change can be scarcely noticed. Others become denuded in a very short period, and such will require extra care.

The Pig in Agriculture.

He is found to produce a pound of product from less food than either cattle or sheep, and is therefore the most economical machine to manufacture our great crop into marketable meat. Our people are becoming wiser every year, and exporting less, proportionately, of the raw material and more of condensed product. If it takes seven pounds of corn on an average to make a pound of pork, as is no doubt the case, the farmer begins to see the great economy of exporting one pound of pork, bacon or ham, instead of seven pounds of corn. The difference in cost of freight makes a fine profit in itself; besides the pound of meat is generally worth more than seven pounds of corn in the foreign market. The production of pork should be encouraged on the further consideration that it carries off less of the valuable constituents of the soil than beef. The fat pig contains only three-fourths as much mineral matter per hundred weight as the fat steer, and only two-fifths as much nitrogen per hundred weight and therefore the production of a ton of pork on the farm will carry off only a little more than half the fertility carried off by a ton of beef. This gives in round numbers the comparative effect of producing pork and beef. It is thus evident that the pig should have a high place in our agriculture; should be fostered in every way—his capabilities studied and pushed—his diseases carefully noted and prevented, for he is the most profitable meat producing animal on the farm. The pig is an excellent adjunct to the daily turning all the refuse milk whey into cash. As he is the king of our meat exports, so let us treat him with great consideration.—Farm Reporter.

Preparing the Hen House For Winter.

It is never too early to begin the building and preparing the henery for the winter, and the man who does this work early is sure to have comfortable quarters for the laying hens just as soon as the cold weather comes. It is better to add a little to the houses each summer, and thus extend the business on a firm basis, than to invest too much at the beginning. We learn better then by experience what we need. Fancy farming does not pay, and those who have elaborate buildings are not always the ones who have the best success. Construct the main building on a slight elevation, if possible, where there is good drainage, and on the lee side of some hill or other protective object. This will shield the house from cold storms, and make the quarters far more comfortable for the chickens. Build the house low and substantial. A high house lets in too much cold air, and a low one is always warmer. Opening into this main roosting building there should be a scratching shed into which the fowls can go on stormy days and have all the exercise they need. This shed should be so arranged that the roof can open in places to admit the sunshine on clear days. We have many wintry days when it would be very comfortable in any place, if the wind could be excluded and the sun admitted. The laying hens in particular will appreciate such a scratching shed in the winter.

The laying shed should also open out from the main building, and this should be made long, low and very tight. The hens should be made as comfortable as possible while on the nest, and this can be accomplished only by bestowing special care in the construction of such a shed. In building all of the henhouses for winter use it will pay to give stone or brick foundation the whole length. This will keep out rats better than anything else yet devised. Besides, it makes the houses warm, dry and durable. Then let the brick foundation run up a foot above and a foot below the ground. The cost in bricks will be made up for in the extra number of eggs and hens saved from the rats. The roof and sides should have tar or builders' paper tacked on between the outer and inner walls, and all knot holes and chinks will thus be filled in. The yard for the chickens to exercise in should be connected with these buildings by a run way. The yard should be large enough to give the fowls ample room to run about in without crowding up against others. On pleasant days they should be made to stay out in the yard.—Farm, Field and Fireside.

Devices For Harvesting Corn.

Not every man knows how to stand up a shock of corn which will not twist or lean into an unrecognizable mass after it has had time to season, says a writer in the Iowa Homestead, from which the cuts are reproduced. When I put up corn by hand I always use a jack like that seen in figure 1. Pull the jack along to the place where the shock is to stand, so that the round pin through the 2x4 piece is directly over the place for the shock. Set up four armloads in the four recesses of the jack made by the pin running through at a, b, c and d. When the shock is half or two-thirds made, remove the jack by withdrawing the pin and finish it without.

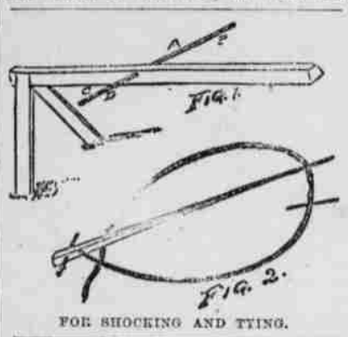
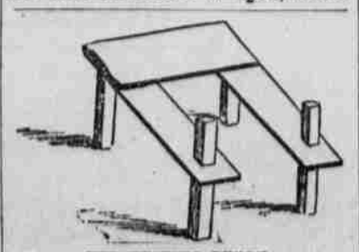


FIG. 2.

FOR SHOCKING AND TYING.

Tie the shock when done by means of a contrivance shown in figure 2, composed of a pole five or six feet long, with a rope put through an auger hole in the pole. This is thrust through the shock two-thirds of the way up, and the rope drawn around the shock as tight as it can be drawn and made fast to the pole while the shock is being tied. A shock made in this manner and properly tied will stand a long time and will stand well. If the corn is to be husked out before it is to be fed to stock, a husking bench, shown in the second cut, will be convenient. This is carried up alongside of a shock which is tipped over on the bench. The husker seats himself on the seat and begins working the stover toward him, and when he gets a bundle of convenient size it is bound and laid aside, and so on until all is husked. This prevents missing any, and it is far more convenient to sit than to kneel down in the mud or snow.

In hauling in the bundles I have found it very convenient to load from the rear part of the wagon by walking up a running board, which hangs on the rear of the rack and is dragged along to the next shock all the time. The rear post of the hayrack should be removed, and two short, stout corner pieces nailed on just high enough to not interfere with loading, but which will prevent the corner bunches of fodder slipping off. I have never shredded any fodded, and know nothing of its value from a practical standpoint, having fed all my fodder in the old-fashioned manner. I have seen the corn harvesters at work, which seems to me to be a very good thing for those who make a business of using much fodder annually in the feeding ration.



THE HUSKING BENCH.

An Italian statistician has computed by means of railroad returns that the foreigners who visit Italy spend annually 361,000,000 in that country.

UTILIZING BY-PRODUCTS.

TURNING WASTE MATERIAL INTO MARKETABLE ARTICLES.

Some Ways by Which Manufacturers Are Enabled to Add to Their Wealth—Accidental Discovery of a Form of Mineral Wool—System of "Briquetting."

The question of disposal of waste material is an important one for every manufacturer and industrial community. Preservation of water supply, availability of land for plant and storage, to say nothing of the pollution of the air and general health of employes, largely depend upon the solution of this problem, and it also means much in dollars and cents through the saving that incidentally may be accomplished.

Coal and iron men were the first to find the accumulation of debris a serious matter. Slack and slate could be put to no use. Furnaces were contrived that burned slack, but even then the difficulty was not obviated, for slate and dust remained. When coke was made, a vast amount of coraize (fine particles) accumulated. Riches went up in smoke until the by-product ovens came into use and ammonia, gas, tar and carbon were taken out, little being left. Gas manufacturers found a ruinous waste till they began manufacturing tarred roofing paper, and even now they are not satisfied with the economy secured.

Iron mill owners from early days have not known until recently what to do with fine dust and slag, and workers of wood in saw and planing mills have had quantities of dust and shavings for which there was nothing but the furnace or torch, with danger of conflagration.

Pittsburg has been a centre of activity along these manufacturing lines, and there the solution of saving devices has first been worked out. Slag formerly was dumped out in great hot masses to be broken up later with the sledge and taken by rail to be used for filling. One day in Steubenville, Ohio, a workman, playing cold water through a hose upon redhot slag, accidentally turned the stream against molten metal. An explosion resulted, and when he looked for the slag it was not there. Instead he saw a snowy mass that looked and felt like asbestos. That was the beginning of the discovery of one form of mineral wool. Several iron and steel companies have improved upon the method, but the principle remains the same. The wool is better than hair or taubark as a non-conductor for protecting and filling walls and floors of dwellings. Recently it has been used there in the manufacture of safes. Packed tightly between the steel walls, it is impervious to the burglar's tools. It will break any drill known.

Railroad men find that furnace slag, well broken, is excellent ballast. It is also ground there and made into tiles, fire bricks and Portland cement. The kind of product depends on demand and local needs.

The system of "briquetting" has provided new means of economy to both mill and mine. "Briquetting" has been known in Germany, France and Wales for several years. It was brought to the attention of Americans through consular reports. It consists in compressing in moulds, by simple and powerful machinery, any pulverized substance and holding it by some amalgam or "binder," such as resin, bitumen or oil. Through this system and others similar, dust and waste fragments may be used. Among the substances handled at a profit are precious metal ores, tunnel dust, concentrates, coal, peat, lignite, coke braize, iron ore, flue dust, manganese ore, iron sand, cement, sawdust, cork dust, etc. The material is fed into machines and comes out in cylindrical chunks about three inches in diameter and four inches long.

The "briquetting" machine men complain that times are too good for them. Manufacturing establishments in Pittsburg, Providence, Chicago and Philadelphia are too busy for them to turn out the orders under eight weeks, and when prices are good and profits are easily made, iron, coal and coke men are not particular about saving the little things. Time of reduced prices and narrow margins drive them back to the system of caring for scraps.

Mesaba ore, which crumbles easily, leaves a great deal of dust. Briquetted, it can be saved for $3.50 a ton. In the river valleys of Western Pennsylvania are three million or four million tons of coal dust, more valuable than slack or lump coal when solidified, as it is clean, not friable in moisture and possesses higher heat units. Furnace flue dust is often sixty per cent. pure, and the value of a method of saving it is obvious. Briquetted coal is specially adapted to naval uses. Sawdust, compressed, becomes excellent fuel.

Slate, since the beginning of coal mining, has been a source of trouble and expense. A Monongahela River worker announces that it can be made into fireproof brick and moulds for casting ingots and other manufactures of iron and steel. Drain tile and sewer pipe of superior quality also come from this despised stuff. Over each bed of bituminous coal lies a layer of slate. This the mouldmaker grinds as it comes from the slope or shaft, and, mixing it with something of the nature of cement, fires it to the proper degree of hardiness.

There is no known limit to the use of materials heretofore considered as refuse. Manufacturers have only begun to see the opportunities within their grasp.

Sewed Up For the Winter.

Here is an amusing incident—suggestive, too—reported in the columns of the Charities Review: A Brooklyn school teacher sent a little Italian girl home "with the order to have her mother wash her until she was clean."

"The child returned shortly afterward, accompanied by its enraged mother, who said some things not really polite to the teacher, finishing with: 'She is washed now, anyway.'

"The only visible evidence of a bath was a clean spot around the little one's mouth and nose. The teacher told the mother that she had meant that the child should be thoroughly bathed. 'She should be put into a tub and washed,' she explained.

"'What!' in a tub? the woman exclaimed. 'Why, that would kill her! And, besides, she's sewed up for the winter.'"—Gunton's Magazine.

THE REAL REASON.

Whitby Explains Why He is Such a Picturesque Slouch.

"I can tell you one thing, Whitby,' said Whitby's friend on the train the other morning, "you are about the most picturesque slouch that commutes on this road. Now I would be so uneasy if I had the top button off my overcoat as you have that it would be impossible for me to contain myself, and yet you simply fasten the coat together with a safety-pin, and seem perfectly contented."

"I try to be contented under all circumstances and never to find fault,' replied Whitby, with a good-natured smile.

"It is a fine way to be constructed," replied Whitby's friend, "but that is not an excuse for slouchiness. Because a man is happy it is no reason that he should go around with a sawedge on his vest-binding sticking out like the whiskers on a cat."

"Your remarks are not without a certain force," replied Whitby, with a broader smile than ever, "and they put me in fine humor, and I am going to tell you of a few other irregularities that may please you more to hear of than to discover. Do you know that at the present time my suspenders are so badly out of kilter that I am wearing as a substitute a razor-strop that was formerly a suspender?'

"I would never suspect it from your gait."

"Nevertheless, it is quite true," replied Whitby; "and I have such big sagging holes in my shirt that I often wonder why it is that I don't thrust my head through them when I dress in the a. m.

"And still you are happy."

"Perfectly," said Whitby, who continued:

"I have also a button off my coat tails, and perhaps it makes me look lop-sided, but it doesn't make any difference to me so long as I know that I am not lop-sided. If these buttons coming off bothered me as much as one would naturally suppose, I would get around the difficulty by wearing a sack-coat."

Here Whitby's friend began to roar.

"What's the matter now?" asked Whitby.

"Why, your thumb and forefinger are sticking through your glove."

"Of course they are; and that is what enables me to fish the change out of my vest pocket when I am on the fly, instead of groping round and fumbling for it for five minutes. And my vest pocket has such a rip in it that I have pulled the hole up to a point and tied a piece of cord around it."

"And then," said Whitby's friend, "the bottoms of your trousers are fearfully frayed."

"If that annoyed me," remarked Whitby, "I should certainly turn them up, like a true Londoner. But, you see, I want harmony, and that is why I like my trousers bottoms frayed like my coat-binding. I may be very slouchy, but I am all right on form. I never wear a high hat with a sack-coat or a colored shirt in full dress."

"I know you don't; but if you did, you would not have a wider reputation than you have now. Some people think it is a wild affectation on your part—that you are copying the ways of the wild poet, whose greatness is so great that he can't realize on his light and airy creations. I heard a stranger the other day speak of you as looking like an inventor, and probably being a man starving while trying to raise capital to put upon the market a gas-stove that can be operated without gas. And then you are not unlike a musical composer in appearance. Perhaps you are going around in this way to make people believe you are a millionaire."

"No, that is not the reason I am going around in this free-and-easy, unmended fashion," said Whitby. "It is not to make people believe that I am artistic, or wealthy, or indifferent to and above the ordinary conventionalities of life."

"Then there is a reason?"

"If you must know, yes," replied Whitby, laughing good-naturedly, "and I know you are aching to know it."

"I am."

"And you won't tell any one if I inform you."

"Not to a living soul," replied Whitby's friend; "it shall be inviolate."

"It is because my wife hasn't the time to sew on my buttons and do my mending."

"Why not?" asked Whitby's friend, in astonishment.

"Because all her time is completely taken up sewing for charity."—R. K. Munkittrick, in Harper's Bazar.

Value of Ginseng Root.

"The digging of ginseng root," says the Kennebec (Me.) Journal, "has become quite a business in some parts of Somerset and Franklin counties. For a long time it has been known that it was in great demand, and consequently brings a good price, as high now as $6 or more a pound. This root is found most in mixed hardwood growth, and somewhat resembles garget. It has to be dried before it is ready for the market, and shrinks about two-thirds in weight. Half a pound a day means big wages to the digger, but the scarcity of it makes it impossible to find even that unless, in Western parlance, one strikes it rich. The question is being asked by land owners whether the man who goes on another's land and takes value therefrom is not trespassing to a great extent and doing that which he has no legal right, any more than if he should cut a certain amount of wood or lumber on the land of another and appropriate it to his own use."

Women Part of the Army.

Each detachment of the army of Peru is accompanied by women called "rabonas." They carry the camp equipage and cooking utensils, cook the food and wash the garments of the soldiers, attend the sick and the wounded and are said to be remarkably skillful in making concoctions of herbs for malarial fevers and other diseases which prevail in the army. During a battle they plunder the dead of the enemy as well as take charge of the wounded of the command to which they belong. They receive no pay, but rations and transportation are furnished them by the Government.

POPULAR SCIENCE.

It is reported that a meteor which fell recently in British Central Africa on the east side of Mount Bomba exploded with a noise that was heard for at least seventy miles to the north and south. The fragments were scattered over an area of nine miles by three, and some of them weighed over five pounds.

The atmospheric ocean surrounding the earth is frequently disturbed by gigantic waves, which are invisible except when they carry parts of the air, charged with moisture, up into a colder atmospheric stratum where sudden condensation occurs. In this manner long, parallel lines of clouds sometimes make their appearance at a great height, marking the crests of a ripple of air waves, running miles above our heads.

Notwithstanding the many traditions concerning mysterious lights seen hovering over swamps at night, and in spite of the attempted explanations of such phenomena in some popular books on science, Professor N. S. Shaler says he is inclined to disbelieve in the existence of these luminous appearances. He has studied swamps for many years, but has never seen a will-o'-the-wisp, and he suggests that the reports about moving lights visible above swamps may be due to subjective impressions induced by gazing into darkness.

Among the places visited by the German exploring ship Valdivia, recently returned from the Antarctic Ocean, was Bouvet Island, which, although discovered in 1739, was only known to have been sighted twice since its discovery, and until the Valdivia's visit had not been seen for more than seventy years. The island is the summit of a volcanic mountain rising three thousand feet above the sea. Its crater is entirely covered with ice, which caves down in a steep wall to sea level. It is situated about 1800 miles west of south from the Cape of Good Hope.

The operation of rhinoplasty is said to be a very common one at Heidelberg, Germany, where the students have long had the ugly habit of slashing each other's noses in their frequent duels. A flap of skin is almost detached from the forehead and brought down over the nose which has been measurably destroyed, this skin then being stitched down on either side of the nose, and in time becomes grafted thereto. Skin grafting is also quite common in cases of severe burns. Small strips of skin are taken from the untouched parts and cut into small pieces, then distributed over the raw surface. In time they take root and grow, spreading until they completely cover the place. The skin of frogs, recently killed for the purpose, is frequently used where human cuticle cannot be conveniently obtained.

In Cape Colony considerable success has been attained in exterminating locusts by inoculation with the locust disease fungus, and this preparation is now supplied by the director of the Bacteriological Institute to residents of the colony at an expense of about ten cents per tube. In one instance a hundred locusts which had been inoculated with the disease were distributed among a swarm, and on the next morning and subsequent days large numbers of dead insects were found on the sand dunes, killed, as was proved by a microscopical examination, by the fungus. The fungus from the dead locusts produced a fungus more rapid in growth, but smaller in size than that which had been produced at the Government station. In some other experiments the fungus was mixed with water in which the young locusts were dipped and then released. After three days' rain fell, and on the afternoon of the fourth day, heaps of the insects were found in the bushes about three miles from the place where they were immersed. The success of this method of extermination is shown by a comparison of localities so treated with places where the fungus has not been tried, there being a marked decrease in the numbers of the pest in the former case.

A Helpful Little Girl.

"Ah, Jack! you cannot tell what troubles a girl has who is receiving the attention of a gentleman."

She was twisting a button on his coat, and looking very demure and shy.

"Troubles, Marie? Of what nature, pray?" he asked, in a tone of surprise.

"Well, one's little brothers are always making fun of one, and one's relatives are always saying, 'When is it to come off?' as if marriage was a prize fight. But that is not the worst. There is the inquisitiveness of one's parents. They want to know everything. There's pa, now; he is constantly asking such questions as, 'Marie, what are Mr. Robinson's intentions? Why does he call upon you so regularly, and stay so late when he does call?' And he sometimes looks so mad when he asks these questions that I actually tremble."

"And what answer do you make to his questions, Marie, my dear?"

"I can't make any answer at all, for, you see, you haven't said anything to me, and—and—of course, I—I——"

Then Mr. Robinson whispered something in Marie's ear, and the next time her father questions her she will be ready with a satisfactory reply.—Woman's Home Companion.

The Hunt For a Great Secret.

All knowledge is hidden from man until he finds it out. It is not forbidden to him to discover the secrets of earth; who shall say that it is unlawful to go further, if he can, and pry into the mysteries that seem to lie outside of earth? Is it trespassing to seek for sure tokens of another life? Who shall say so? The most that conservative observers may say is that, so far, spiritualism has seemed trivial, misleading and inexpedient. That demoralization, if not madness, has seemed to lie that way; and that those who have been content to go about their business here, taking the future life on trust, have seemed to fare better than those who have directed earthly energies into a search for proofs of unearthly facts.—From "The Point of View," in Scribner's.

SWAY OF THE SWEATER.

How the Popular Outing Garment Ousted the Cardigan Jacket.

"I had a customer for cardigan jackets the other day," said a dry-goods jobber to a friend with whom he was taking luncheon, "and it seemed like reading a chapter from an old, forgotten book."

"It's no worse than receiving an order for hoopskirts," said another merchant, "and that happened to us recently."

And then the merchants told stories of the time when one of the leading articles in the sample trunks of men who sold fall and winter goods for men's wear "on the road" was cardigan jackets. Some houses carried as many as a hundred styles, ranging in price from $9 to $100 a dozen, and the bulky nature of the goods made it necessary to devote much space to the line. The jackets were worn by all classes, and the article was considered one of the staples of the men's furnishing goods line. But the sweater has crowded the cardigan jacket out, and according to the opinions of those who sell the goods it has gone never to return, except as an article of small demand.

"Ten years ago all the sweaters sold by us," said a large dealer in athletic goods, "were made by hand at a Shaker village in New Hampshire. They were worn then by oarsmen and by men who were in training for the prize ring, and a man wearing a sweater attracted about as much attention as one in kilts. But soon the baseball and football players began wearing them, and within a short time the sweater became a necessary part of every gymnasium outfit. The demand became so great that nearly all the mills that had made cardigan jackets a specialty put machines to work on sweaters. As the new article gained in favor the old one fell away, and the demand is now so great that the original manufacturers — the Shakers—could not supply us for the slowest week in the year."

Although the athletic and the outing trades make heavy drafts on the product of the sweater manufacturers, there are other and larger consumers. These are men who work in the street, lumbermen, longshoremen, railroad men, sailors and drivers of teams. The article which is used by these people is not so good as the one made for athletes, and sells as low as seventy-five cents, and from that price to $1.50, while the better article brings from $2.50 to $6.

"The jersey," said a manufacturer of woven goods, "was the forerunner of the sweater, and a curious point about these two articles is this: The jersey was brought on the market as an article of women's wear, and it enjoyed great popularity for several seasons. It was not an outing garment, but one of dress, but, like all articles of women's dress that can be produced at a low figure, the jersey soon found its way into the lower circles, and then became unknown as an article of dress in places where fashions are made. But with the bicycle it became popular once more; it was adopted by men, and is now worn by riders all over the country. But the women got even with the men for taking the jersey away from them by going in for sweaters. There are large quantities of sweaters made now for women, who wear them at golf, in the mountains, in the gymnasium, and for outing generally. The goods made for the use of women are usually of a superior grade, although they are made also in the middle and low grades."

There are not many factories where sweaters are made exclusively, but nearly all the mills where underwear is manufactured produce some of these popular garments.—New York Tribune.

WORDS OF WISDOM.

The meek, the disinterested, the unselfish, those who think little of themselves and much of others—who think of the public good and not of their own—who rejoice in good done, not by themselves, but by others, by those whom they dislike as well as by those whom they love—these shall gain more than they lose; they shall "inherit the earth" and its fulness.

Without the resolution to do good work, so long as your right hands have motion in them, and to do it whether the issue be that you die or live, no life worthy the name will ever be possible to you; while, in once forming and adhering to the resolution that your work is to be well done, life is really won.

If there is one thing in the world that should be free from compulsion of any sort it is a gift. Directly it is associated with forceful urgency or suggested by extraneous reasons, it loses all its grace and all its character.

Enjoy the blessings of this day and the evils of it bear patiently and sweetly, for this day only is ours; we are dead to yesterday, and we are not yet born to the morrow.

All growth, all strength, all uplifting; all power to rise in the world, and to remain unrisen, comes from the hold we have taken upon higher surrounding realities.

Force yourself to take an interest in your work and the effort will soon become a pleasure instead of a hardship.

Difficulties of thought, acceptance of what is without full comprehension, belong to every system of thinking.

It is the way in which we employ odd minutes that counts for or against us in the end.

The motives of men are to be judged more by their actions than by their words.

The heart cannot always repress or account for the feelings which sway it.

An hour of careful thinking is worth more than ten of careless talking.

True education never induces contempt of the ignorant.

Live as though life were earnest, and life will be so.

Little to Choose Between Them.

"Dorothy, women act like idiots in a bargain rush."

"Well, Richard, don't forget how men act scuffling for supper on an excursion steamer."—Chicago Record.

A service of motor vehicles has been started between Rosas and Figueras, in Spain, a distance of twelve miles. The vehicles have a seating accommodation of nine passengers.

THE SABBATH S

INTERNATIONAL LESSON C FOR OCTOBER 2

Subject: Psalms of Deliver Lxxxv. and cxxvi.—Golden cxxvi., 5—Commentary on Lesson.

1. "Thou hast been favora hast dealt graciously. It was of God that Israel got and kept of Canaan, and if He had n very favorable to them they been ruined many times. The back of their captivity was stance of God's favor to them, accompanied with the pardon iquity. "The captivity of Jac naturally applied to the return lon; but it suits recovery from ity.

2. "Covered all their sins," hast freely forgiven sin, its and abominable nature no lo The whole is put out of sight are restored from our captivity queuces no longer appear.

3. "Taken away all Thy wra hast collected all Thy wrath a away with all our iniquities. of Thine anger." The captives rejoice that the wrath of limited, and so they had not destroyed.

4. "Turn us." Thou hast captivity, now convert our sou raelites were not restored from tivity all at once; 50,000 retu the leadership of Zerubbabel, others, numbering about 7000, Ezra, B. C. 453; others with N C. 445; but a great number s in Babylonia, Media, Assyria, other parts. The request of t is to have a complete restoratio Israelites from all places of sion.

5. "Wilt Thou be angry with Continuously? Delivered fro the exiles hoped for rest, bu found increasing distress and which to them indicated God's anger. Generation after gene stunted and therefore suffered ment of God. The Psalmist se tion whether God will find it thus continue, or can it be that ceeding generation will not p examples of others and so themselves severe judgments was there of better times until came sincerely and thoroughly

6. "Wilt Thou not revive us have long had the sentence of selves, and have feared an utter Shall not our nation yet live b Shall we not become once more pious and powerful? "May rejoi Give us life, that we may have so Thou wilt have the glory of be the fountain of all our mercie be the centre of all our joys.

7. "Shew us Thy mercy." mercy always recognizes that deserved.

8. "I will hear." Wait and expectancy. The Psalmist goes to consult the Lord, and having request waits an answer from t prophecy. By declaring what he the Psalmist teaches all Israel ought to attentively hearken to of God and to receive His gracio tions and promises in faith and tion, and His holy precepts and tions in obedience and submis especially that they should wat what answer God would return prayers.

9. "Salvation is nigh." Rea granted as soon as there is reali ceive. That complete salvation erance, even the redemption of the Messiah. It was the comfo Old Testament saints that they lived not to see that redemption lem for which they waited, yet sure it was nigh and would be all that fear God. "That glory in our land." That we may s see glorious days in our land; our ancient glory, the tokens of ence with us, the most eminent we have now utterly lost. God and glory. Israel when fully pa joyed peace with God; for where He manifests His glorious powe

10. "Mercy and truth are met And therefore appear as united erating harmoniously in conse God's glory or majesty again the land when the people shou converted to His fear.

11. "Truth." Responsive to mercy, there shall be man's fruit works. "Righteousness shall lo When a people return and adhe in duty He will return to and them in mercy.

12. "The Lord shall give." glory of the Gospel dwells in our it shall yield its increase; for perity will either bring outward with it, or sweeten the want Psa. 67:6.

13. "Righteousness shall go bef Christ, the Sun of Righteousn bring us to God and put us that leads to Him. Righteousness guide, both in meeting God and ing Him.

1. "The Lord turned again the of Zion." The writer here recal joicing which filled the hearts a of the Israelites on their return tivity, in the midst of the ack ment by Gentiles and Jews that liverance was a wonderful as deed of Jehovah.

2. "Filled with laughter." A joy in God, not scorn of their a heathen had observed their cal had triumphed in it. Jer. 22 137:7. Now they could not be their deliverance and admire tha

3. "We are glad." The heat spectators, but the people of God it as shares in what God wrought

4. "As the streams in the sou torrents and the brooks in the deserts run off and dry up in the months; but after the periodical return again, and the channels for the refreshment of the thirsty

5. "They that sow in tears." in captivity for the punishment degeneracy. God sent them into just as gold is put into the fire fined. The captives in Babylon sowing in tears, but at length wer forth with joy, and then they r benefit of their suffering, and their sheaves with them to their in their experiences of the goodn to them. They that sow in tear sorrow shall reap in the joy of pardon and a settled peace.

6. "Goeth forth and weepeth precious seed." There are tears themselves the seed that we tears of sorrow for sin—our own tears of sympathy and tenderne number of returned captives was remnant of Israel. They were to promote the true religion in Through their prayers and te brethren in Babylon must be re induced to return to God and land.

The Secretary Bird.

The secretary bird of South useful in destroying the serp on which creatures it almos sively feeds. It derives its na the curious feathery plumes wh ject from each side of its h have a fanciful resemblance carried behind the ear by hu retaries. Undaunted by the teeth of the cobra, the secret comes boldly to the attack, and of all the efforts of the infuri desperate reptile, is sure to victorious. In its combats with serpent the wing is the most i weapon, and answers equally purposes of a shield and a c the serpent rises to strike, t tary presents the front of its w buckler and almost immediate the snake to the ground by from the same member. It a with considerable force, and al variably concludes the comb violent blow on the head beak, which lays the skull of t completely open.