

AGRICULTURAL

SMALL FRUITS FOR THE FARM.

Mr. T. C. Beasley writes on the subject of small fruit culture on the farm, giving the results of his experience from which we quote: Six years ago I secured 200 Black-cap raspberry plants, and planted them in hills in my garden three feet by six feet, or at the rate of 2,400 per acre. I never gave them anything but ordinary cultivation, enough only to keep down the weeds and grass. I think it was three times per year, which was less than the care or cultivation of a crop of corn. The first year of their bearing, I picked and sold \$12 worth, besides what a family of eight persons used to eat; also used a proportionate amount put up in cans, jellies, etc. The amount sold from those 200 hills has increased yearly, not stinting the use of them in the family, until last year at the unprecedented low price of \$1.50 to \$1.75 per crate of twenty-four quarts, each, I sold fourteen crates, netting me \$23, or at the rate of \$276 net per acre, as I figure that the amount used in the family, if sold, would more than pay the cost of picking, boxing, etc. When I first planted the 200 hills I thought that I might get enough fruit from them to supply my own table, and in that case would have been satisfied with that much return from so small a plot of ground—forty-eight by seventy-five feet. But each year as I would jingle the twelve, fifteen or twenty good dollars that lay in my pocket as additional returns in the way of bounteous profits yearly for so little labor expended, I began to study and figure, and the more I figured, the more I planted out of small fruit, until now I have a goodly acreage that brings me yearly returns fifteen to twenty times greater than what a crop of corn did before, and eight to ten times greater than a crop of potatoes, and at no greater outlay of either time or money in cultivation, acre per acre, than either of the other crops. What I have said about raspberries is also true regarding currants and gooseberries, and I think with a greater profit to the grower, as the care and expense is not so great in currants and gooseberries, you have not the old vines to take out each year, and the pruning is not so radical. The cultivation would be about the same; this is my experience with the few currants and gooseberries I have. I regret very much that I did not plant acres of them years ago where I now have only hills. This year I shall plant largely of them. Can I, as a farmer who lives on a farm of 160 acres, worth \$125 per acre, close to a town of 10,000 people, neglect these small details, small fruits, when I have proven by my own actual experiments, extending over a period of six years that there are immensely greater profits in these small fruits than there can possibly be in any cereal or vegetable crop one can raise, yea, ten to twenty times greater? The pleasure we derive from growing them and from having them fresh on our table, says no. And the credit side of our ledger decidedly says no. And besides all this, what fascination and what enjoyment there is in their culture. Verily it is "a labor of love from start to finish." It is business farming. There are no mysteries about it. Just good "horse sense" is all that is needed.

BUCKWHEAT STRAW AS A FERTILIZER.

Figures show that this plant has considerably more ash than any other of the grains. That it has largely more phosphoric acid than any other, equal to four times that of wheat; and three times as much of lime. It has more sulphuric acid than any other of the grain crops, and many times as much chlorine, while few surpass it in the quantity of soda. These facts are of great interest in regard to this really valuable crop plant. In addition, the grain has more protein in it than barley, and as much fat as this grain, and nearly twice as much as wheat or rye. At the same time, under due culture and on good land, it will yield fifty bushels per acre, which has been made several times by the writer, and the market value of it for making the popular flour, is always above that of wheat. If we may judge from these facts, we may be sure that the refuse of the crop is of really surpassing value for the manure made of it, when used as a litter. It is true there is a common prejudice against it on account of the belief that it has the effect of inducing disease in animals, under which it is used as litter; a prejudice—by the way—that has no support in fact, and seems to be as ill founded as the belief that it may be grown on such lands as will not yield a profitable crop of any other kind. The old and common adage "Give a dog a bad name and you may hang it," seems to be applicable to this really valuable plant for its yield of grain and the fertilizing value of its straw.

PRUNING YOUNG TREES.

The following extracts from a letter written to Gardening may be useful to those who contemplate pruning young trees. The writer says: It is not saying too much that many young trees are ruined by severe pruning, and many more are much weakened by it. A gentleman who had set out an avenue of pine oaks a year ago, recently inquired if it would be a good time to cut away some of the lower branches. The trees, he said, were about seven

feet high, and it was his desire to have no branches lower than five feet. Now I may say first, that for a lawn tree, no branches should be cut away. The prettiest specimens are those with branches sweeping the ground. But in the case of the one who was seeking advice, there were good reasons for desiring that the lower branches should not be retained. My answer was that unless the trees had more branches above five feet than I should suppose, it would be highly injudicious to cut away any of them until the trees were stronger, and I would repeat the advice to any one seeking it in similar circumstances. A young tree well established, and well branched, will grow a great deal faster if its branches are not taken away. I am sure that had the party referred to tried an experiment, cutting away all branches below five feet on the half of his trees, and leaving the others untouched, he would have been abundantly satisfied of the correctness of my advice. I have seen the mistake made many times. Those who raise trees in a commercial way are well aware of the danger of cutting away the lower branches of trees too soon. Trees intended for avenue planting, which often have to be with bare stems from six to seven feet high, are not trimmed up to the required height at once. They are let grow almost at will for a few years, branching wherever they will, and in this way from sturdy trunks in less time than if they were pruned up at once. A great deal the better way, as I told the party inquiring, is to cut away a few only, every year, not commencing at all until the trees are five to six feet high, having in mind. I was explaining this to a friend one time, and he replied, "Well, but I see here some young oaks which you have transplanted trimmed up almost to a bare pole." I acknowledged this and explained that in such cases it was a necessity to save the life of the trees. Roots had been lost in transplanting which had to be met by shortening the tops. I added that had the trees been moved with all their roots intact, such as would have been the case if they had come from out of pots, there would have been no pruning necessary.

SOAKING SEEDS.

Prof. Waugh has been conducting experiments to determine the value of soaking small seeds to aid them in germinating. Both pepsin and diastase were used in the experiments, and the professor gives preference to the latter. He explains that the diastase used "is really only malt extract. We dissolve one part of powdered malt in ten parts of water, strain it, and put the seeds to soak twenty-four hours. A quart of malt, worth five cents or less, would thus make ten quarts of liquid, or enough to treat ten pounds of tomato or radish, seeds, or peas."

THE BLACK ROT.

Sulphate of Iron as a winter treatment is used in France for preventing the black rot and other diseases of the grape. The method of application is to bathe or sprinkle the vines with a 10 per cent. solution of the sulphate and then place a small quantity of the powdered sulphate around the base of the vine.

THE WORLD'S SHIPYARD.

British Shipbuilders Were Never so Busy as at the Present Time.

Engineering, shipbuilding, and ship fitting industries in England have never been so busy as now. They are making up for the last half year of the great lockout with a vengeance, night shifts being almost universal and deliveries hard to secure under two years. The immense bulk of the men who were out are at work again, but there are several hundred marked agitators who will not be taken back anywhere. The men show no disposition to quarrel on their account. They have learned a good many lessons since midsummer, and among them is a wholesome distrust of the "leaders" who get them into trouble, and so grossly bungled their efforts to extricate them from it. Many stories are current of how generously individual employers behaved in feeding the women and children during the distress, and it is easy to believe that there is a better and more cordial feeling of the men toward the masters to-day that England has known for a long time. There will be no strike in trades for years to come. The masters, though intent on re-establishing amicable relations with the men, are incapable against those employed who refuse to join in the lockout. Their boycott against Harland & Wolff, of Belfast, is going to be the most interesting thing of its kind the shipbuilding trade has ever known. The manager of this great firm, Pierie, who is already Lord Mayor of Belfast, wants to go to Parliament, and is charged with refusing to join the lockout in order to make favor for himself with the electorate. He bids fair to pay dear for his seat, for the Masters' Federation talks of nothing less than smashing this Leviathan of shipbuilding firms. The steel plate manufacturers, for example, are being compelled to decline to sell to Harland & Wolff, under pain of losing the entire Federation's custom, and the principle is being extended to cut off practically all their supplies. It may involve the ruin of Belfast's principal industry.

Nearly all the residents of Montrenil, France, are engaged in the manufacture of dolls' heads.

SEA CAPTAIN'S SALARY.

MASTER OF A BIG OCEAN STEAMSHIP BY NO MEANS A PLUTOCRAT.

Low Wages Given Other Officers for Onerous Duties—The Purser and the Doctor Have Slim Purse.

It is the general impression among those who do not know that the duties and responsibilities of the average skipper of a regular liner are as many and onerous as the successful bank president, and that in addition his salary is just as large. The responsibility of the one is about as great as the other, but when it comes to duties the sea dog has, as a rule, much more to bear, while, unlike the bank president, his salary is as small as his duties are large. It may surprise some of the regular trans-atlantic travelers to learn that their bean ideal of a sea captain who in faultless gold lace goes about the deck laughing and chatting with the tourists, patting the half-fare tots on the back and doffing his cap to the rug-clad occupants of an easy steamer chair between the time that he spends in his berth, in the chart room or on the bridge, gets little more money a month than the detective sergeant or the average steamboat captain. In many instances Mr. Gold Lace gets less.

One of the most successful lines running between New York, and Europe pays its commodore, who has been over twenty years in this particular service, £35 a month, or about \$175. This is about \$40 a week. The other captains in this line are paid the equivalent of \$125 for thirty days' labor. Any number of matter-of-no-fact stories have been printed with the object of showing that the commanders of the great liners received in some cases sums ranging from \$7,000 to \$12,000 per year. But such talk is idle. There is not a single captain on the ocean who enjoys such an income! That many of them deserve to be another matter entirely. In an argument that master mariners are well paid the point is advanced that the officers are

FED WHILE AT SEA

and even alongside the wharf with the best that the market affords and at the expense of the steamship company. Yet 80 per cent of these well-fed gold laces are married and have big families that demand food, clothes and a home either here or abroad, whether or not the ship is in port. This establishment costs as much while the master mariner is on the bosom of Old Neptune as it does when he is playing dry cob at home for a short period. His going or coming adds or deducts little from the general cost.

There are few pursers on the Atlantic who command a higher monthly salary than £100. They must have years of experience, a host of friends and be "top-sawyers" as they say at sea, to command even this figure. Unlike the stewards, and in the majority of cases, the ships' surgeons, the purser is seldom made the recipient of a generous tip. Nobody seems able to explain why it is so, unless it be that the purser, handling all the money of the voyage, which includes extra money, the receipts from the smoker made through the chief steward, all amounting to a pretty large figure, is recognized as the financial end of the floating hotel and is treated accordingly.

There is no man aboard ship who is more generally thrown in with the passengers than the purser, and there is none who is capable of making himself more popular or the reverse. Seven-eighths of the complaints go to him, and he has the power to rectify them if he will. He can change the berth or the room of the passenger who thinks the accommodation assigned him not up to expectation. That in itself is the source of a great deal of his popularity. He may go into the smoker at night when his assistant is maintaining the rigor of office hours, puff away at his briar, sip his grog with the tourists or make himself generally agreeable with the poker crowd between card draws. The smoker and his many attachments are luxuries which the captain is not permitted to enjoy, or if permitted, rarely indulges in. Any skipper who would make himself

A JOLLY GOOD FELLOW

in the smoker would lose the confidence of those under his care as fast as a trout taking a May fly. Not that his appearance there would make him any less the sailor, but passengers, for some reason or another, seem to believe that the only place for the master of their ship is on the bridge or in the chart room. And if they can picture him on this bridge in oilskins and so'wester with the wind and sleet and ice blustering around him so much the better to the perfection of their idea of the practical and capable mariner.

The poorest paid man in an official capacity on a great liner is probably the surgeon. Some passengers have the opinion that as the company pays the ship's doctor those using him on a trip are not supposed to give financial recognition to his attention. It is true that none is obliged to, but he should. The demand of a doctor at sea is in no way different from that demand on land. The steamship companies give a passenger board, lodging and transportation at a cost that could not be equaled on any railroad on the earth, when distance, accommodation and attention are con-

sidered. The luxury of a doctor, while generally forced, is at the same time an auxiliary of sea travel for which the company receives nothing, and which, when free medicines are included, as they invariably are, costs quite a good deal. Experienced ocean travelers seldom forget the surgeon when necessarily making them call for his attention during a trip. But these experienced tourists are few and far between. The majority of patients troop ashore at the end of a passage without so much as a flourish of an empty hand to the sawbones of the good ship that brought them over.

On many of the big liners the "chef" receives as compensation more than any two of the gold lace brigade. The truth of the old saying that the easiest way to reach a man's heart is through his stomach is just as applicable to the gentler sex, at least it is on ship-board. A superior table with all other conditions equal means the superiority of any or every steamship line. For that reason the kingly pin of the cuisine controls

THE BIGGEST SALARY.

which not infrequently equals if it does not exceed those paid to the captain and his chief officer. Economy is rarely applied to the head of a floating culinary establishment, even though it does attack Mr. Gold Lace. Yet if more liberal salaries were paid these sea dogs it is doubtful if their standard of efficiency could be improved, for those on the Atlantic cannot be equalled anywhere, not even east of Suez, where the skipper of a regular liner is the monarch of all he surveys.

But if economy is practised on the "lad" of the ocean, as Kipling calls the liner, it is on a small scale compared to that followed on the "poor old cargo boat." An examination of the annual statements of a number of tramp steamer concerns flying the British flag will show that the masters of these vessels receive not more than \$80 per month. The deck hand of an ordinary river craft would howl like a Ceylon pirate if he had to do as much work as some of these captains for as little money. Of course, where such poor salaries are paid to master mariners who have hundreds of thousands' worth of property at their command, there is generally a leak, and the butcher, baker, candlestick maker and even the stevedore and the ship chandler at ports where this cheap sample of tramp touches has to furnish a rebate, which the captain pockets without the formality of informing the ship's husband.

The other day the British board of trade suspended for three months the certificate of the captain of the Beecroft. The investigation, held at Liverpool, showed a unique and startling device on the part of the master of that vessel for pocketing the wages of his crew during a voyage. It was shown that the captain took a big stock of liquor to sea with him, which he retailed to the men during the trip. He had among other spirits twenty cases of whisky, for which he paid \$8.50 a dozen bottles, and this stuff he sold to the men at about \$4 a bottle. The carpenter's bill for whisky, gin and beer during the voyage amounted to \$67.

The Ashby, of West Hartlepool, is run on an economical plan if ever a ship was. On a passage from Baltimore to Bilbao the ship averaged nine and a half knots per hour on a consumption of

TEN TONS OF COAL A DAY.

This coal cost but six shillings a ton, which made the daily expenditure for fuel about \$14.80. The engines of this ship, although of the triple expansion type, are made with a view to economy as well as for speed. There are but three engineers on the Ashby, including the chief. The donkeyman stands a watch, but does not, of course, get engineer's pay. The ship has a dead weight capacity of 2,650 tons, and notwithstanding this fact, her entire crew list, including officers, numbers only twenty-one men. This is certainly one of the samples of tramp steamers that has reached the point where freights must be remarkably low if she cannot be made to pay.

The Buckingham is another sample that averages ten knots as hour on a consumption of fourteen tons of coal a day, has a displacement of 2,700 tons and carries a crew of twenty-nine men all told, the A. B.'s or sailors, of which get only \$12 a month. Of course the shareholders of these ships make a lot of money through this economy. Take the Crescent as a sample of profit. Here is a craft that has paid £389 10 shillings per sixty-fourth share for five and one-half years' work. Her original cost is understood to have been £335 per sixty-fourth share, so that she left over 21 per cent per annum continuously for five and one-half years. Rock-bottom prices for wages and Klondike finds for profits were never in the rush for gold with the successful "poor old cargo boat."

HIDDEN BEAUTY.

How strange that we should walk for years, Friend with friend, nor look above, The pretty trials, the few poor tears, For proofs of deepest love!

Why is it in the hour of death, As man bends o'er his wife; His soul may feet at her last breath, Love never known in life?

Ah, heartless man, pray, why is this, With eyes you could not see; Nor feel communion in a kiss, As in catastrophe!

It needs the fierce, refining fire, To purge the dross from gold; And oft in some disaster dire Our friends we first behold.

A BIG THING.

Wine-ladle—Wilkins has invented a telephone appliance which can not fail to make his fortune. Gilderbeve—What is it? Wine-ladle—It is a device to enable two ladies to talk over the same wire at the same time.

ITEMS OF INTEREST.

A Few Paragraphs Which Will be Found Worth Reading.

Nearly all savages have sound teeth. Imperfect teeth are a sign of civilization.

Snakes and other reptiles are the only animals which seem to be able to exist without drink.

Rabbits are so plentiful in the markets of Omaha that they are sold as low as twenty-five to fifty cents a dozen.

All the employees of a new literary paper in Paris, named Le Fronde, editors, composers, press-workers, etc., are females.

The cost of fuel on steam railroads is about ten per cent of the operating expenses; on electric roads it is about five per cent.

Beet sugar to the amount of 2,800 tons was produced in the United States in 1889. Last year the quantity raised was 45,000 tons.

A rude wag in Waterbury, Vt., threw a polecat through a neighbor's window and so scented a \$75 carpet that it had to be buried. He was fined \$25.

Bicyclists in India are becoming profane. Their chief enemies are the mosquitoes, which not only bite their limbs and bodies, but actually bite through the tires.

In Dawson City, Alaska, in the depth of winter, the foam on a glass of beer turns into a substance resembling ice-cream in one minute after being drawn from the keg.

The descendants of Mrs. Watt, of Ferryden, Scotland, number 269, twelve of whom were her sons and daughters. She recently died in that town in the 101st year of her age.

England receives no tribute from any of her colonies. They are of advantage to her only as markets for her productions, and as permanent homes for her superfluous population.

The term "infantry" meaning foot-soldiers, originated with the Spanish. It was first applied to the military force employed by an infante, or young prince of Spain, to rescue his father from the Moors.

Last year the importations of champagne in the United States aggregated 219,000 cases. This is only about one-fourth of the quantity consumed here. The other three-fourths must therefore have been spurious.

The hotel and gambling halls at Monte Carlo last year made a profit of \$2,880,000 over all expenses. For the next ten years Prince Albert of Monaco will exact \$250,000 a year from the gambling syndicate for its lease.

James McIndoo, of Modesto, Minn., is a remarkable young man. He is only 18 years of age, yet he is 6 feet 10 inches tall and weighs 303 pounds. He wears a 24 shoe, a No. 8 hat, and drinks a gallon of water at a time to quench his thirst.

The Rev. Thomas E. Moore, one of the five young men who, in 1865, originated the Salvation Army in London, recently met an unexpected death. He was preaching in the Baptist Church in Harper, Kansas, and dropped dead in the pulpit.

A torpedo, such as those used by railroads for signaling, was found by Frank Warren, aged sixteen, of Middletown, N.Y. In attempting to explode it by hammering a piece of his nose was torn off, and the sight of one eye was destroyed.

A Jewish congregation in Chicago, that of Dr. Emil G. Hirsch, holds divine service on Sundays instead of Saturdays. Hebrews all over the United States are discussing the propriety of a general change of the Jewish Sabbath from Saturday to Sunday.

Pawnee County, Kansas, offers a bounty of three dollars for every head of a coyote brought to the Treasurer's office. These animals have slain numerous sheep, and even young calves are their victims. Hunters make big wages by the slaughter of coyotes.

Having a marriage in view with a new charmer a Parisian student determined to abandon an earlier sweetheart. She begged for a final meeting. They met, and in half an hour he was in a stupor from drugged wine. Then she poured vitrol in his eyes, utterly destroying his sight.

The sense of smell possessed by Patrick J. Lauphear, of Lexington, Ky., is very keen. He is fifty-five years of age, and his nose is considered the best whisky tester in the world. By simply smelling whisky he can tell the age, ingredients, and market value of any spirits of that kind. His nose has already enabled him to accumulate a fortune of \$80,000.

Biliousness so affected a Cleveland man that his doctor told him he must give up drinking coffee. He refused. Five or six weeks passed, and his physician noticed a marked change in the man's appearance, he had a clear skin and was active and vigorous. "So you have given up coffee?" said the doctor. "Indeed I have not," replied the man. "I still drink two cups every morning." He was not aware that his wife had substituted imitation coffee for the genuine article.

HIS PRESENCE EXPLAINED.

Friend (over the wine after dinner)—Your wife is certainly a brilliantly handsome woman. I should think you would be jealous of her.

Host (confidentially)—To tell you the truth, Robbins, I am. I never invite anybody here that a same woman could possibly take the least fancy to.