Agriculture.

HOW FOWLS GRIND THEIR FOOD.

Fowls have no teeth to grind or masticate their food with, and the best they are able to do with it is to pick it up and swallow it whole. Kernels of grain are swallowed whole by them, and as they are surrounded by a tough pellicle or skin, which the juice of the stomachs of the animals will not readily dissolve or disgest, they could obtain no nourishment at all from grain, if this tough pellicle was not broken. Now, if we dissect the gizzard of a fowl of any kind, we find a lot of small gravel stones, which are usually the hardest kind of flint, granite or sand stone. Surely here is a pocket edition of Farm Grist Mills.

Fowls swallow their food broken or not, and it enters the crop or first stomach, and remains in it until it has become softened, more or less, when a small quantity at a time, just as grain runs into the grist mill is forced into the gizzard among the gravel stones. This gizzard is a strong muscular stomach, and plays night and day, when there is a grist to grind, similar to bellows, contracting and expanding, thus forcing the gravel stones into the grain and breaking it to fragments, and triturating the whole mass; after which it is in a suittable condition to be quickly digested. -S. E. Todd in Farmer's Union.

WHAT CAN BE DONE ON AN ACRE. The editor of the Maine Cultivator published a few days ago, his management of one acre of ground, from which we gather the following result :- One third of an acre of ground usually produced thirty bushels of sound corn for grinding, besides some refuse. This quantity was sufficient for family use, and for fattening one large or two small hogs. From the same ground he also obtained two or three hundred pumpkins, and his family supply of beans. From the same bed of six rods square he usually obtained sixty bushels of onious; these he sold at \$1 per bushel, and the amount purchased his flour. Thus from one third of an acre and his onion bed he obtained his breadstuffs. The rest of the ground was appropriated to all sorts of vegetables for summer and winter use-potatoes, beets, turnips, cabbage, green corn, peas, beans, cucumbers, melons, squashes, etc., with fifty or sixty bushels of beets and carrots for winter food for a cow. Then he had a flower garden, also raspberries, currants and gooseberries, in great variety, and a few choice apple, pear, plum, cherry, peach and quince

PASTURING ON CLOVER.-T. L. Shepard, Lowell, Ohio, says :- As I have been puzzled by conflicting testimony in regard to turning cattle into clover, part of which I thought good, and part decidedly bad, I determined to give some rules, so plain that the wayfaring man need not err therein; and here they are: -1. Never put anything into fresh clover pasture on an empty stomach. 2. Never when the grass is wet. 3. Never when the weather is changing from warm to cold. 4. Do not give salt for at least 24 hours before putting in the first time, nor until the evening of the second day. 5. Do not let them remain in more than twenty minutes the first time after which they may run, wet or dry, with perfect safety. Without such precautions thereis danger of swelling with bloats, and valuable animals are often lost in this

TOMATO SOUP .- Boil one pint canned tomatoes for twenty minutes in one pint water, then add one pint milk very gradually, that it may not curdle; season as for oyster soup, and serve with hot crackers or squares of toasted bread .- Hearth and Home.

The Maine Poultry Association offers a liberal premuim to the boy not less than twelve years of age, and another to the girl over twelve years old, for the best collection of fowl of their own raising, to be exhibited at the fair of that association.

France has imposed a tax on chestnuts. As Paris consumes no fewer than half a million bushels annually, it is reckoned that this tax will yield upward of \$100,000 to the Treasury.

Twenty thousand cattle passed through Fort Worth, Mo., last week, headed for Eastern slaughter yards.

STRAWBERRY FERTILIZER.—In answer to an inquirer, Colman's Rural World relates an experiment in fertilizamount of fruit on those where the liquid was applied to what was obtained on those vines right alongside of those where none of the liquid was applied." It is not impossible that in a dry season equal results? To have made the experiment conclusive, he should have treated a portion of the patch with water alone, a portion with the solution of ammonia and nitre, and left a portion without either, and noted results .-Rural Home.

A GREENHOUSE OF ARTIFICIAL FLOWERS.—Forty-one of the leading artificial flower makers of Paris combined to send to the Vienna Exhibition a specimen of their united skill, which shall prove incontestably that the capital of France still reigns supreme in the matter of artificial flower manufacture. This patriotic contribution consists of a complete greenhouse, filled with flowers of every description perfectly imitated. In it are hyacinths, the illusion of which are the fibres thrown out by the roots; bouquets, in which one sees the flower freshly blown and that which has been in existence but two hours; wild flowers, the soft, grey down of which seems ready to float away. Two sides of the greenhouse contain artificial feathers quite the equals of their floral brethren. The whole work is a marvel of artistic skill and unexampled patience.

Scientific.

ATMOSPHERIC TEMPERATURE.-M Tissandier states that in a late balloon ascent from Paris he reached a height of 6,560 feet above the earth, where, having passed through layers of clouds he found a bright sunlit sky and a temperature of from 63 deg. to 65 deg. Fah. When descending and re-entering the clouds, which were in a highly electric state, the temperature decreased to 27 deg., and the balloon was surrounded by small crystals of ice.

Solid-Iron ships .- A Philadelphia mechanic proposes to build steamships of one solid piece of iron or steel. without a joint. This he accomplishes by welding the plates and frame, instead of using bolts or rivets. He claims that he has invented machinery great saving of cost, of weight, and of time, and with great gain of strength and durability, and that such a vessel cannot leak, and will bear a much more violent blow on rocks, without injury to her bottom, than a vessel made of plates and frames riveted and bolted together.

THE FEET .- As the feet are kept more closely covered than any other part of the body during the day, they should be thoroughly washed and rubbed till dry, every night. Impurities gather as the result of the confined perstiration, and these should be removed before sleeping. However inconvenient to do so, we repeat it, wash the feet every night.—Phrenological Journal.

An English gentleman has recently discovered near the well of Moses, by the Red Sea, the remains of ironworks so vast that they must have employed thousands of workmen. Near the works are to be found the ruins of a temple, and of a barracks for the soldiers protecting or keeping in order the workmen. These works are supposed to be at least 3,000 years old.

Notes and Queries thinks it worth while, before the ballot comes into operation at a general election, to put on record a list of the professions of the members of the British House of Commons elected on the old system; 129 are described as lawyers, 98 as merchants, 7 as newspaper proprietors, 6 as medical men, 5 as University professors, 2 as farmers, and 2 as Dissenting members.

A Vermont man who caught the small-pox four years ago and communicated it to some of his neighbours, has just been sued by them for damages, on the ground that to his carelessness was due their infection.

LANGUAGE OF ANIMALS.—Certainly all animals have a mode of expressing their feelings to others of the same ing strawberries :- "I procured a species. Wolves arrange attacks, bunhalfhogshead, filled it with rain water, ting in packs. They are all animated First Quarter, July 2nd, 6h. 56a. afternoon. and put into it one-quarter pound of by the same thought, and therefore Full Mcon. ammonia, and one-quarter pound of travel with energy for hours to accomcommon nitre. When the strawberry plish a design of which each member of plants were blossoming out, I gave them | the enterprise has a rational understanda sprinkling of the solution at evening, ing. Deer and Buffaloes act in concert twice a week, until the fruit was nearly in regard to seeking food or water. full size. The result was double the Perhaps the government of wild horses, through signs which any horse in a group of hundreds instantly recognizes as an imperative command of one individual, who prances up and down the line like one in authority, is about as clear water would have produced nearly | perfect and as mystericus as anything in natural history. Birds and dogs are exceedingly sociable, enjoying the society of their kith and kin as much as country cousins when they visit city relatives. Rats and mice, too, and even insects, are supposed to have the faculty of communicating their wishes and opinions to each other.

> A PICKPOCKET'S DISCOMFITURE. A woman who was riding in a Broadway omnibus, not long since became aware that the "gentieman" on her right was feeling for her pocket under her cloak. For a moment a cold shiver passed through her, but as it was broad daylight, and as there were Parrsboro', Cornwallis, Horton, Hantsport, Nos. 8 and 10 (Freight and Passenger Acevidently many persons in the omnibus to whom she might apply for protection, she took courage, recollecting that in the dress she wore her pocket had, much to her previous annoyance, been sewed on the wrong side of the kirt, concluded to sit still and await the course of events. After having been sufficiently entertained by the vain efforts of her neighbor to find the pocket, she turned to him, and said quietly, " My pocket is on the other side, sir." The man immediately jumped up, pulled the strap, and disappeared with most amusing rapidity, the coolness of the lady having been too much for his artistic nerves.

The best linseed oil is yellow, transparent, and comparatively sweet scented, and has a flavor resembling that of the cucumber.

NOTICE.

THE Subscriber offers for Sale his well 1 known Farm, Situate in Wilmot, County of Annapolis, on the North back road, about one half mile east from the Wilmot to a medicine at that time prepared by Mrs Spa Springs, and about one and a half miles | Gates of Wilmet, which in an incredibly short from the Railroad Station. Said farm contains 125 acres of very valuable land, advantageously divided into Hay, Pasture, and Woodland. The bay and tillage land are under a superior state of cultivation, the pasture is of an excellent quality, and wood lot sufficient to supply a family for generations to come. On the Farm is a comfortable House of Size and accomodations to suit a large family. Also 2 good Barns, with other convenient out buildings all in good state of repair. An abundant supply of water is carried into the House by pipes from a never by which the thing can be done, at a failing Spring, and also taken for the use of

There are about 100 grafted apply trees producing from 60 to 200 barrels annually. This property is so well known that further

particulars are unnecessary. The terms of payment will be made easy, only a small proportion will be required down, with good and approved security for the re-

The stock and farming utensils can be had by a purchaser of the farm if required. For further particulars apply to the owner on the premies,

GEORGE BALLENTINE. Wilmot, County of Annapolis, ¿ January 22nd, 1873.



Superior Pianos,

IN VARIOUS STYLES.

UPRIGHT, OBLIQUE, SQUARE, Etc. With all the latest improvements, manufactured by the subscribers, and especially adapted to this climate. An assortment of

THE "SILVER TENGUE." A very fine toned CABINET ORGAN, by Carhart and Needham, N. Y. The above are offered to a discriminating

public at moderate prices, WM. FRASER & SONS, 70 & 72 Barrington St. June 1.

H. G. LAURILLIARD, TAILOR,

GENTLEMEN'S DRESS MATERIALS.

Furnishing Goods constantly on hand Agent for the

NEW YORK FASHION PLATES. 231 HOLLIS STREET. HALIFAX, N. S.

May 17.

HALIFAX, N. S., JUNE 25, 1873.

MESSENGER ALMANACK.

JULY, 1873. -

" 10th, 2h, 19m, morning,

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Windsor, Newport, and Truro.

High water at Pictou and Cape Tormentine, 2 hours and 11 minutes later than at Halifax At Annapolis, St John, N. B., and Portland Maine, 3 hours and 25 minutes later, and at St. John's, Newfoundland 20 minutes earlier, than at Halifax. At Charlottetown, 2 hours 56 minutes later. At Westport, 2 hours 54 minutes later. At Yarmouth, 2 hours 20 min-

FOR THE LENGTH OF THE DAY .- Add 12 hours to the time of the sun's setting, and from the sum subtract the time of rising.

FOR THE LENGTH OF THE NIGHT -Subt. 43. the time of the sun's setting from 12 hou. and to the remainder add the time of

Joyful news for the Afflicted,

GATES' Life of Man Bitters.

Mrs. Alice Robinson of Williamston, in the

county of Annapolis and Province of Nova Scotia, deposeth and eaith that in the year 1840 she was fearfully and distressingl, afflicted with a combination of complaints which altogether rendered her almost helpless, during which time she was treated by one of the ablest physicians residing in the county, and part of the time by two Physicans for about a year, and still was not sensible of any material benefit or relief. And after a time she was recommended time acted like a charm upon her whole system, and she was entirely cured of all her various difficulties and complaints and remained as she considered a sound and healthy woman for about twenty five years.

Mrs. Robinson further states that in the autumn of 1869 she was taken ill and was under the doctors hands all winter, and in the spring ensuing she was taken with a most obstinate and distres ing cough which the Doctor was unable to cure. She was also afflicted with the piles and other troublesome complaints. At length she resolved to apply to Dr. Caleb Gates for as istance and help, and soon found them all yielding to the power and influence of his justly celebrated medicines, and rays she is completely free and cured of all those various difficulties through the kindness and skill of Dr Gates and the efficacy of his most excellent medicine.

MRS. ALICE ROBINSON Sworn to at Williamston, this 9th day of February, A. D., 1872, before me, JAMES WHEELOCK, J. P. Lunenburg, Nova Scotia?

Sept. 18 1871. Dear Sir:-Last winter I was so trouble 1 by a severe cough that I feared consumption would ensue. I failed to obtain relief from any source, until I tried your medicine. I now state on my oath, that one bottle gave me reief. I centinually keep it for the use of my family and would not think of being without

Yours most respectfully, GEORGE ARENBURG. Swern before me ene of Her Majesty's Justice. of the Peace for the county of Lunenburg. JAMES D. SELIG. J. P.

PRICE. Bitters \$1 per bottle : Syrup 50 cents per bottle; Liniment 25 cents per bottle and the ointment 25 cents per box. Address CALEB GATES & CO.,

Farmington. Wilmot, Annapolis Co.

A large number of certificates, similar to the above, have been received and will be published at times for the information of the afflicted and the people generally.

AGENTS. - George V. Rand, Wolfville. John Webb, Windsor. J. E. Newcomb, Hantsport. J. L. Cogswell, Kentville. Sheffield & Wickwire, Canning.

GENERAL AGENT, JOHN K. BENT. 126 Granville Street, Halifax. May 21.

BAZAAR.

THE Ladies of the Baptist Sewing Circle in Onslow intend holding a sale of useful and ornamental Articles at the New Baptist Meeting-House in Onslow, in the last week in June or the first week in July ensuing of which timely notice will be given. Tea and Refreshments will be furnished on the occasion, the proceeds to be in aid of the Baptist Church Building-Fund. Contributions which will be gratefully received, and may be forwarded to

MRS. JAMES MCCURDY, MRS. JAMES LINTON, MRS. FRANCIS LARRAIN.

Onslow, May 21st, 1873. May 28.

COMMENCING ON MONDAY, 26th May, 1873.

1873—Summer Arrangements—1873

NO. 1. (Through Passenger Express) will leave Halifax at 7 30 a. m., and be due in St. John at 8.30 p. m. This train will stop (between Halifax and Truro) only at Windsor Junction and Shubenacadie; and (between Painsec and St. John) only at Booking Stations, except where it may be necessary to cross other trains or to put down passengers who may have got on board at Pain-ec and stations East and South of that place.

No. 2. (Through Passenger Express) will leave St. John at 8 a.m., and be doe in Halifax at 8.50 p.m. This train will stop(between St. John and Painsec) only at Hampton, Su-sex, Petitcodiac and Moucton; and (between Truro and Halifax) at Shubbenacadie and Windsor Juncton, except where it may be necessary to cross trains or to put down passengers who may have got on board at stations North and West of Truro.

Nos. 3 and 5 (Pictou Passenger Accommodation) will leave Hal fax at 6.15 a. m., and be due at Pictou at 12.15 p.m. Nos. 4 and 6, (Shediac Passenger Accommodation) will leave St. John at 7 a m, and be due at point DuChene at 12.15

Nos. 7 and 9. (Freight and Passenger Accommodation) will leave Halifax at

commodation) will leave St. John at 10.50 a. m., and be due at Point Du-

Chene at 7.25 p. m. No. 11. (Truro Freight) will leave Halifax at 3 30 p. m., and be due at Truro at

9 10 p. m. No. 12. (Passenger Accommodation) will leave Painsec at 4.20 p. m., and be due at Point DuChene at 5.00 p. m. No. 13 (Truro Passenger Accomodation) will

leave Halifax at 5.15 p. m., and be due Truro at 8.15 p. m. No. 14. (Passenger Accommodation) will leave St. John at 2.00 p. m., and be due at Hampton at 3.10 p. m.

No. 15, 17 and 19. (W. & A. R.) will leave Halifax for Windsor Junction at 8.01 and 8.45 a. m., and 3.00 p. m. No. 16. (Peticodiac Freight) will leave St. John at 245 p. m, and be due at

Petitcodiac at 8 p. m. No. 18. (Sussex Passsenger Accommodation) will leave St. John at 4.40 p. m., and be due at Sussex at 6 40 p. m. No. 20. (Truro Passenger Accomodation) will leave Truro at 6.00 a. m., and be due

in Halifax at 9.15 a. m. No. 21. (Sussex Passenger Accommodation) will leave Sussex at 7 a. m., and be due in St. John at 9.00 a. m.

No. 22. (Traro Freight) will leave Truro at 6 45 a. m. and be due in Halifax at 1 20 p. m. Nos. 23 and 25. (Shediac Passenger Accomme-

dation) will leave Point DuChene at 650 a.m., and be due in st. John at 12 noon. No. 24 and 26. (Freight and Passenger accommodation) will leave Pictou at 6.00

a. m., and be due in Halifax at 2.35 Nos. 27, (Petitoodiac Freight) will leave Petitoo-

diac 7.00 a. m. and be due in St. John at 1 30 p. m. Nos. 28 and 30. (Pictou Pas enger Accommodation) will leave Pictou at 1 45 p.m.

and be due in Halifax at 7 30 p m. (Passenger Accommodation) will leave Hampton at 5 45 p m and be due in St. John at 6 55 p. m.

Nos. 31 and 33. (Shed ac Passenger and Freight Accommodation) will leave Pt. Du-Chene at 10.30 a. m. and be due in St. John at 7 45 p m.

Nos. 32, 34 and 36, (W. & A. R.) will be due in Halifax at 11 00 a, m. 6 45 p. m and 8 25 p. m. No. 35, (Passenger Accommodation) will leave

Point DuChene at 3.20 p. m. and be due at Painsee at 4 p. m. Nos. 37 and 39, (Truro and Moneton Freight

Passenger Accommodation), will leave Truro at 9. 30 p. m. and be due at Moneton at 8,10 a. m. Nes. 38 and 49, (Mencton and Truro Freight

and Passenger Accommodation), will leave Moneton at 6.45 p. m. and be due at Truro at 5 30 a.m. LEWIS CARVELL,

General Superintendent. RAILWAY OFFICE, Moneton, 19th May, 1873.

FANCY SALE AT ANTIGONISH.

THE Ladies of the Antigonish Baptist Sewing-Circle intend holding a Sale of Fancy Articles early the ensuing Summer for the purpose of aiding in the erection of A NEW BAPTIST MEETING HOUSE

Contributions to the Fancy or Cash department, will be most thankfully received by either of the following Committee. Mrs. F. Cunningham, Mrs. T. M. King, Mrs. C. B. Whidden, Mrs. I. F. Robb, Mrs. J. B. Me-Quillin, Antigonish. Miss Naggie Hill, Sydney, Mis Fannie King, Truro, Mrs. Reuben Hart, Halifax. Antigonish, March 22nd, 1873. April 2.

THE CHRISTIAN MESSENGER

Is published every WEDNESDAY. Terms-Two Dollars a year, when paid in acvance; if payment is delayed over three months \$2.25 when over six months \$2.50. Subscribers beyond the Dominion of Canada, must send in addition to the above, 20 cents a year for prepayment of postage.

ADVERTIZING at usual rates. STEPHEN SELDEN, Proprietor. OFFICE No. 71 GRANVILLE STREET, HALIFAX, N.S.

PRINTING of Books, Pamphlets, Cards, Handbills, Blank forms, &c., &c., on reasonable terms. Magistrates Blanks always on hand. THE C ASSC Reloved The annual The of mean and the

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