

MICHIGAN FARMER

AND STATE JOURNAL OF AGRICULTURE.

DETROIT, APRIL 1, 1884.

THE HOUSEHOLD---Supplement.

THE MODEL WIFE.

My good wife is knittin', and 'yond plays the kitchen,
The yellow
But she heeds not the charmer, the snarl don't alarm her;
Her thoughts are on me and of love.
Her smile, so bewitchin', lights parlor and kitchen,
For she's sunshine both upstairs and down;
All bustling and busy, is Bonnibelle Lizzie,
The best little wife in the town.
She's too true to her labors to gossip with neighbors,
With a greeting she passes them all;
And the women that always are whisperin' in hallways
She shuns, for their talk is too small;
With affairs of Miss Prattle and Dame Grundy Tattle,
With the names of poor Jones, Smith or Brown,
Coining mischief they're busy, but not so with Lizzie,
The best little wife in the town.
When her tins a bright line, like silver are shinin',
And the kettle is singin' for tea,
You'll find her a-sittin', and quietly knittin',
Awaitin' the comin' of me;
And the thought's so beguilin' the dimples go smilin'
The plump rosy cheeks up and down—
Still her fingers are busy, no dreamer is Lizzie,
The best little wife in the town.
When I finish my daily long tasks I sing gaily:
"From the toil of the bench, love, 'I'm free!"
Though the stars twinkle o'er me my heart flies before me
To her who is waitin' for me.
I steal in behind her, with strong hands I bind her,
My queen of the calico gown;
The little hands busy I clasp and kiss Lizzie,
The best little wife in the town.

THE COOK'S RESPONSIBILITIES.

The "whispering" is so often repeated that it must soon be understood as a household adage, to first cook an especially good dinner for the "good man" ere you venture to request a dribblet from his purse. Every woman in our free and enlightened country has a right to do "that kind of thing," I suppose, and if in spite of all considerations of justice, as well as ordinary kindness, a man must be wheedled out of what is not his own by any right but that of might, that would prove as sure a way to accomplish it as any, for a pen that wrote much wisdom, taught us "the shortest way to a man's heart is through his stomach," and it may be true of most men, but I am glad it was not said of women. I think if I could not reach the point by some other route, I would give up the trip.
I am a firm believer that much of com-

fort and health depends upon well cooked and neatly spread meals; food prepared with a view to suit the appetite and eaten with relish, will no doubt better assimilate and strengthen the physical system. And, too, if one would receive the utmost benefit of food it should be partaken of in an amiable and cheerful spirit, with pleasant conversation and genial society. To accomplish all this the cook must be possessed of ability and good common sense. There is no small amount of judgment and care required to produce a good, wholesome meal, even where everything necessary is at hand, with conveniences with which to accomplish it.

Although Miss Corson, having every thing in readiness for the performance, could cook without soiling her rich dress, to show how neatly the work could be done, she at the same time proved plainly the value of domestic conveniences and requirements. I doubt her cooking "that meal" with such ease and unsoiled raiment and unruffled temper if done with green wood a "rod too long" for the fire-box, or "stept it" forty rods from the house for water. And this philosophical science of cookery, taught or untaught, must be displayed in every house three times three hundred and sixty-five times yearly, and that but a tithe of domestic labors for the health, comfort and prosperity of a family of undecided numbers, and all by one member of the household. Not one housekeeper in every dozen *does* have even necessary conveniences to render the task in any way easy or agreeable. But it must be done, and is done over and over, through every stage of preparation, until the cook has the least relish of any for her culinary achievements, and then if she requires a small outlay of dollars and cents she must perforce gain it by strategy! If I were compelled to resort to scheming, it would be conducted thiswise: "Aaron, whenever you are ready to pass me the stamps for the purchase of that stylish winter hat at N.'s, you may decapitate that fat gobbler and confidently expect a royal dinner."

AARON'S WIFE.

FENTONVILLE, Mich.

ENTERTAINING COMPANY.

Ladies, we are all talking at once, and upon such a variety of subjects, and asking so many questions, that I expect every moment to hear Beatrix rap with the mallet upon the editorial table and command silence.

I would like to answer "One of the Girls;"

also say a few words about "woman's tears;" but I forbear, as I have been busy with the sick for two or three weeks, and I think some one has written ere this. I will say a few words about entertaining company.

We are created intelligent, social beings, and the interchange of ideas and social intercourse are among the necessities and pleasures of existence. The custom of entertaining guests with honor and courtesy is as old as the race. With the folly and extravagance of fashionable city receptions, we have nothing to do. We are farmers and country people, and receiving guests in our homes is what we are to consider.

Because we are farmers, can we have none of the elegancies and refinements of polite society? We can. I think a farmer's home can be made one of refinement as truly as any other, but in order to do this there are many little things that need correcting in many homes.

If a woman performs her household duties without the aid of servants or grown up daughters, entertaining company sometimes is difficult, because she cannot entertain her guests as she would like to, since her husband's and hired men's dinner must be in time, and other duties must be performed.

I think many of our older housekeepers set a bad example when they entertain company. They have accumulated wealth until they can afford luxuries, and they not only fill their tables but crowd them. Their daughters marry and go to house-keeping. The young people have their homes to earn and their fortunes yet to make; but when the young housekeeper has company, she thinks she must set as good a table as her mother or rich neighbor. This is folly. If you went to these young people and asked them to subscribe for more than one paper, or buy an entertaining book, the reply would quite naturally be, "We cannot afford it; we are just commencing." Better do with less pie and sweetmeats, and lay the foundation for a good library to entertain your guests with.

In entertaining company, the first requisite is to make them truly welcome. Then spend all the time possible visiting. Let the meals be the secondary consideration. I believe in gossip; but let it be a happy, beautiful kind, not the blackening, damning kind that debases both speaker and listener.

In setting and ornamenting the table, I would give the utmost latitude. Make

the table as attractive as possible. The humblest home can make a neat and attractive table; and very much depends upon the looks of the table and the way the food is served by host and hostess. When it is time for meals, prepare them with neatness and care, and try to have them truly refreshments.

OLD SCHOOL TEACHER.

TECUMSEH, March 20th.

A VISIT TO THE SEA GARDENS.

How hard it was to believe it was mid-winter, that sunny morning in early February! Luxuriously resting in a commodious easy chair beside the low, open window, the scent of blossoming roses floated softly about me, lulling my senses into drowsy, delicious languor, while my eyes rested dreamily upon as fair a picture as one often sees. Not fifty yards away, the crystal waters of the bay gently lapped the sides of the rugged sea wall, which in direct line with my point of view was surmounted by great tubs filled with sponges, that the slow moving negroes were washing, ready for the market. To the left of them, rose a small forest of sails and spars, and beyond, the blue waters of the South Atlantic. My book lay open and unread upon my lap, while I gave myself up to the delicious sense of idleness. Suddenly my reverie was broken by a soft, slow, sweet voice saying close to my ear: "Missa, Missa, Cap'n Jones says as how it's a fine day for de sea-gardens for we got a souf win!" I turned to see the eager black face of "Joseffa," the captain's mate, and for a moment felt half vexed at the intrusion. Remembering that we had been waiting two weeks for this same "souf win" I made "Joseffa" happy by saying that I would go, and sent him to notify my friends. Half an hour later a merry party of eight were assembled on board the "Sylph," a trimly built little yacht, just large enough to accommodate ten. Everybody was too warm, everybody was talking, and the scantily clothed, good natured colored captain was besieged with questions, for somebody—I think it was the Consul—had maliciously hinted that a south wind meant "squalls" or "hurricanes."

Slowly the Sylph worked her way out from the tangle of small craft, which swarmed on all sides like huge water-beetles, and as she swung out into open water, the sail was hoisted, caught a puff of wind and bowed so deep a farewell to the receding shore, that a simultaneous scream came from the ladies, and a gruff "Look out there, Jones," from the gentlemen. Away she sped through the most wonderfully beautiful water in the world, so clear that looking down five fathoms deep we could see the sea eggs clustered upon the coral bed of the bay, so blue and such a blue it is indescribable. It is only three miles from Nassau to the sea gardens, but a south wind necessitated a great deal of "tacking," so that two hours or more elapsed before we rounded the point of the reef, and anchored in the sheltered arm of the sea, where the submarine world could be viewed to the best advantage.

Water glasses were quickly brought out, which were nothing more nor less than water pails, from which the usual bottom had been neatly replaced by a pane of glass. Placing one firmly upon the water as if upon a table, and looking into the pail, I seemed transported to a new and beautiful world. Instantly my childhood's belief in coral caves inhabited by sea nymphs and grottes where mermaids slept, returned, for here, plainly visible to the eye, was a realm far more wonderful than the wildest fairy story's fiction. As my vision pierced the crystal depths, I lost all sensation of being on earth, and seemed to float in balmy restfulness beneath the waves. Tall purple and green and brown sea plumes waved gently to and fro, like the daintiest ostrich plume in the summer breeze. Here and there sea fans of every conceivable size and shape stood upright, looking a rich golden or rose color in the shining light. Long stretches of white glistening sand seemed to form pathways through clusters of tree-shaped corals and fantastic sponges. Here, unclipped and unbleached, in all the glory of their native element, they formed a most interesting and picturesque array. There at an angle of the pathway stood a tall sponge, resembling an ancient vase, and peeping over the rim of its delicate cup a small family of mollusks clung, in their brilliant shells, looking like stray blossoms wantonly dropped. Closely was an immense oval mound of brain coral, back of which rose a small forest of plumes, fans and coral sponges growing in beautiful confusion. Gracefully gliding in and out among the stems of this sea forest, or gently pausing beside some vase form, were fish rivaling in brilliant coloring the gayest forest birds. Notice that large one making an inquisitive call at the deserted house of a conch. Is he not handsome in his silver coat so dazzling in its brightness? Ah, there comes another inquisitive one, a regular little "buttercup" in his suit of rich gold, with a dainty black cap, and I suppose that great "goggle eye" following him so pompously is his guardian. There at the top of a large sponge, darting rapidly in and out of its spores, is a tiny fish that looks as if he might be a bit of condensed rainbow. What an elegant home for the nymphs is this mass of pale amber coral, and what wonderful little architects formed its towers and hallways! Notice what a dainty azure tint glows from the interior, the light shines in through the window in the roof, and streams through the broad open front. If we could only catch a glimpse of the inmates, I am sure we would see some lovely "water-babies," but those great sharp-nosed fish in their odd red and white striped suits are such vigilant guardsmen, I can only see flitting, brilliant forms now and then. Evidently the nymphs are well up in high art, for here is something that looks very like a sunflower. What a fine bed of "rose leaves," and just beyond something that makes you wonder if violets and blue-bells really grace a mermaid's garden. Dear me! what is that queer thing floating toward

us with such a great hump on his back, and such monster arms hanging down and propelling him slowly along? Evidently he is not an agreeable companion, for the wise little fish give him a wide birth. Truly here is a fine specimen of "Neptune's Car" but rather small, and I presume belongs to some of his infant grandchildren.

Further investigation was rudely vetoed by companions pulling me somewhat forcibly into the yacht, over whose side I had leaned so far in my eagerness to see all, that I had nearly fallen overboard and to add insult to injury, some wretched puns were fired at my luckless head, which had remained so long "in-pailed." During our absorbed contemplation of the bottom of the sea, Joseffa had divested himself of all except one small garment and slipped over the bow of the boat into the water, and now announced his readiness to dive for some of the treasures we so much coveted. Obedient to our eager commands he went again and again to the bottom, his wiggling body assuming grotesque shape and proportions, as he struggled with some clinging specimens, his staring eyes looking like great white beans amid the surrounding blackness. Sometimes he came to the surface with beautiful fans or sea plumes or broken branches of coral, but too often the treasures that shone so fair at a distance under water, proved valueless when brought to the surface. Finally he clung panting to the side of the boat and said so appealingly, "Ise tired, ladies," we could do no less than become suddenly interested in the distant landscape, and allow the poor fellow to drop the role of diver, and assume the character of mate.

And now up came the anchor, the sail was partly hoisted, and the Sylph crept gingerly over the bar, glided around the point and out into the long narrow bay. In obedience to a whispered hint to "let her dy, captain," full sail was set, and away we flew before the wind, the sharp prow cutting the water till it flew in drenching spray over the boat. In three minutes we were perfectly satisfied with Joseffa's statement that the Sylph was the fastest sailer afloat in the tropics, and begged for less speed and a lower sail. Half an hour later the Sylph swung to her moorings, and eight tired but happy voyagers sought restful solitude and shade in their respective rooms, there to live over in memory the beauties of the wonderful sea gardens. I. F. N.

NASSAU, Bahamas, March 15th.

THE FARMER'S WIFE.

I usually enjoy the Household department very much, but, both in this and other papers, sometimes see articles that I do not like, and that I think are injurious in their style, especially to young girls. I mean those in which the lot of farmer's wives is harped upon as almost wholly devoid of all that makes life happy. The farmer is represented as treating himself to all the modern improvements and labor-saving machines, while his wife toils on day by day with the same old stove she began housekeeping with twenty years

before; churning from twenty to sixty pounds of butter each week, while her husband refuses to replace the old dash churn with a better one, but pockets the proceeds of the butter, as well as of chickens and eggs. The poor woman is not even allowed a sufficiency of comfortable clothing for herself and children in many cases given by these writers, but shivers through the winter weather in her faded calico dress and thin shawl, asking in vain for a few dollars to buy the children flannel enough to make them comfortable; her house is bare of comforts, conveniences and pretty things—though we do not see how she could ever find time to enjoy beauty or luxury; since her work lasts from early morn till bedtime—and, even if she does not sink into a premature grave, she is faded and broken down before she has scarcely reached her prime. And all this time her husband grows richer, and adds acres to his farm and work for his weary wife, with never a thought that she needs help in her work.

All this and more have I read, and the moral seems to be: "Girls, marry anything but a farmer! The men of other professions are exempt from the meanness, selfishness and stinginess, all of which are characteristics of farmers." There may be now and then cases of women leading such lives as I have just mentioned, but that they are common I do not believe, and it certainly is not fair to take one instance out of a thousand, and hold it up as an example of a whole class. I am a farmer's wife, myself, and, though not quite old enough to have absorbed all the wisdom attainable in this world, have seen a good deal of the life of the working classes, both farmers and mechanics, and the result of my observations is this: A man who is selfish, irritable and stingy, will make his wife unhappy, whatever his business; but if he be kind, affectionate and generous, she will never be anything but happy—unless by her own fault—whether her life be spent in hut or mansion, city or country. For there is nothing in farm life to change the nature of man or woman;—though if a man be either weak or narrow in mind or morals, the country is the best place for him.

Of the farmers' wives of my acquaintance, there are some who overwork, but in every case she is more to blame than her husband, (and not one of these but has every help and convenience that the circumstances of her husband justify). My nearest neighbor says: "I never get any time to read, I like flowers, too, but never get any time to tend them, I never get time to teach my boy good manners, or anything else," and so on. "Why do you not have help then?" I ask. "Well, my husband is always trying to induce me to get a girl, but I tell him folks would think me lazy if I did." "Folks think" is responsible for more broken down farmers' wives, than are stingy or careless husbands. There is necessarily much hard work to be done by the wife of any working man who has not yet reached the goal of prosperity. But most of them add

much that is unnecessary, and do many things every week for the sake of what "folks will think." There is no doubt that the lives of very many farmers' wives could be made easier, and their homes pleasanter for all the inmates by their own efforts. And the woman who goes into farm life with a stronger love for home than for society, will find there as much to enjoy and make home happy as can be found in city or town. MAY.

KEWANEE, ILLS.

MEDICAL WORKS.

Mrs. A. H. D., of Hadley, asks me to name some good medical works. The book I referred to as having proved so valuable in a relative's family, is by M. Freligh, M. D., and published by C. T. Hurlburt, 896 Broadway, New York city. Its price I do not know. It is a homeopathic work. That so highly commended by my friend is "Wood's Household Practice," but I cannot tell where it is published, nor whether it is "old school" or "new."

Mrs. E. M. A., of Centreville, speaks very highly of "The Homeopathic Guide," by I. D. Johnson, price \$2, which may be procured through a physician.

Almost any book which gives symptoms and treatment of disease will answer the purpose in the family. The physician's greatest skill is shown in diagnosing disease, discerning symptoms; he must know what is the matter before he begins to "doctor." The woman who buys a medical work for home use, must cultivate this power as much as possible; her success depends more on this than on the nature of the book. I would not advise depending upon any book, however excellent, in cases of severe illness, but for slight indispositions, which may become serious if neglected, in families where there are children, and where people live at a distance from physicians, such a work I consider a very valuable thing to have in the house.

BEATRIX.

ROOM FOR ANOTHER.

We have been without the MICHIGAN FARMER for some months, and I have missed it very much, and when my good John came home a few days ago and said he had renewed his subscription, I was very glad. When it came to us last week with a neat little Household, all by itself, I was quite delighted.

You see we lost our grape crop last summer, for the first time since we began to raise the fruit, some 14 or 15 years; and that, with the failure of the wheat and corn and the apples also, made us rather short, but as the cold winter is passing away, and the snow is fast disappearing, we look forward with hope to another season of prosperity.

I find the bread question has been discussed, for in the last paper some one sends thanks for "the excellent never failing receipt for making bread," and as I have had more trouble the last few months, than in all my thirty years' ex-

perience as housekeeper, will it be asking too much to have it reprinted? M.

IONIA, March 24th.

[We have forwarded a copy of the FARMER containing the recipe to "M." Hope she will write again.—HOUSEHOLD ED.]

FLOWER SEEDS FOR FARMERS' WIVES.

I am now prepared to fill orders for flower seeds of all the varieties which have become standard favorites by long cultivation. I have many varieties of the same flower, and can send a mixture of the various sorts in one packet, to those who prefer, notably of the following varieties: Pansy, Verbena, Phlox Drummondii, Sweet Pea, Petunia, Poppy, Nigella, Calliopsis, Aster, Mignonette, Cockscomb, Snapdragon, Calendula, Catchfly, Euphorbia, Gaillardia, Linaria, Scabiosa, Ricinus, Ten-Weeks Stock, Zinnia, Whit-lavia, Pyrethrum, Balsam, Delphinium, Crysanthemum, Golden Feather, Feverfew, Marigold, Mirabilis, Nasturtium, and Gysophila. These are not all my annuals, but a list of the hardy sorts to choose from. I can furnish any of the others generally grown.

Among climbers, I have the old favorite Morning Glory, Adlumia, Scarlet Runner, Balloon Vine, Cucumis (said to be the only plant which can be seen to grow), and bulbs of Maderia Vine.

Among the perennials I can furnish seeds of Flax, Valerian, Delphinium, Pea, Hollyhock, Satin Flower, Sweet William, Millefleur, Evening Primrose, Hesperus, Double Aquilgia, in all varieties of color, and Yellow Alyssum, as well as others not enumerated.

Prices are so very low every one can have a variety for a small outlay. The above for five cents per packet, (except Pansies, ten cents,) fifty cents per dozen packets, thirty for \$1; and with each fifty cent or dollar collection a packet of wild garden seed.

Mrs. M. A. FULLER, (Aaron's Wife,) Fentonville, Genesee Co., Mich.

HOUSEHOLD HINTS.

"Aunt Nellie," in the *Farmers' Advocate*, says: "A great help in hanging out clothes is an apron to put the pins in. Mine is sixteen inches long and eighteen inches wide, rounded at the corners. It is double, and at each side near the belt the outside piece is cut away and bound, making openings to put in the pins and take them out when hanging out the clothes. The apron is bound around firmly and will hold several dozen pins. A belt fastens it about the waist, and with this on there is no need of stooping to pick up clothes-pins. In this apron may be kept a pair of cotton flannel mittens to wear when hanging out clothes in cold weather. They are a great saving of the hands. One who has once had a pair of these mittens and one of these aprons will not willingly do without either of them."

We find the following instructions respecting the washing of black silk or lisle

thread stockings, in an exchange: "Put a teacupful of bran in a thin muslin bag, tie so that the bran is loose in the bag, and put into enough luke-warm water to wash the stockings. Not a particle of soap is used, the bran water taking the place of it. If the stockings are much soiled, pass through two waters. Roll the stockings tightly in a towel and dry at once before the fire—never in the open air. By washing them in this way, black stockings remain black until worn out."

Cooked eggs, says "Aunt Em," in the *Rural New Yorker*, will always tarnish all silver or plated-ware with which they come in contact. Remedy: When washing spoons, forks, knives, etc., so discolored, take up with a damp finger a small quantity of very fine table salt, and gently rub the spot with it; the stain will disappear at once. The finger is softer and better than a cloth.

The nicest and quickest thing to clean window glass with is clear water, not very warm, and a chamois skin. Wash the glass clean, then wring out the chamois as dry as you can and wipe the glass with it. This is all that is necessary. The glass will not dry streaked, and there will be no lint on it. The skin can be used many times with proper care.

Contributed Recipes.

MRS. J. W. PERKINS, of this city, furnishes the following:

LAYER FIG CAKE.—One cup sugar and a quarter cup of butter, beaten to a cream; three eggs, beaten very light; half-cup of milk; pinch soda; season with extract lemon; add two teaspoonfuls baking powder to two cups of flour, and sift into the whole; bake in three layers. **Filling.**—Half a pound fresh figs, chopped fine; half-cup sugar; cup of water; juice of half a lemon; cook until tender. When cake and figs are both cold, spread the filling between the layers.

BANANA CAKE.—Four eggs, beaten very light; cup sugar; two tablespoonfuls melted butter; half-cup water; one and a half cups of flour; two and a half teaspoonfuls baking powder, sifted in the flour; do not stir but beat thoroughly the mixture after adding each ingredient; bake in four layers. **Filling.**—For frosting, use the whites of two eggs, beaten stiff; sugar to thicken; frost both sides of each layer; slice four large bananas and place between the layers and on top.

We credit "Aaron's Wife" with the two following recipes:

FLOATING ISLAND.—Set a quart of milk to boil, stir into it the beaten yolks of six eggs; flavor with lemon or vanilla, and sweeten to suit the taste. Beat the whites of the eggs to a foam. When the custard is thick pour into a deep dish and heap the beaten whites upon it.

BIRD'S NEST PUDDING.—Pare, quarter and core nice tart apples; butter a deep pie-tin and cover the bottom with the apples. Make a batter of a pint of not very rich, sour cream, one egg, a teaspoonful of soda, a little salt, three teacupfuls of flour; pour over the apples and bake half an hour; when done turn bottom side up on a dish, and cover with butter and sugar

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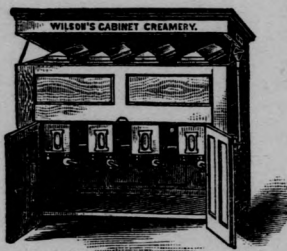
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CHAS. A. WARREN, City P. & T. Agt., Mar. 9, 1888. Detroit, Mich.

O. W. RUGGLES, Gen'l P. & T. Agt., Chicago, Ill.

STATE OF MICHIGAN.—Circuit Court for the County of Wayne. In Chancery.

At a session of said Court, held at the Circuit Court room in the City of Detroit on the 15th day of March in the year 1884. Present Hon. Wm. Jennison, Circuit Judge, John H. Toepel and Babetta Toepel, Complainants vs. Matthew Higgins, Daniel E. Prescott, Assignee, etc., Parker McDonald, Carlisle McDonald, Louis C. Hassinger, David Preston, John L. Harper, Robert H. Brown, Alfred Bunclark, Margaret E. Brown, Sarah Bunclark, Herbert Bowen, administrator, etc., John T. R. Brown and Sarah H. Brown, Defendants. Upon due proof by affidavit that Parker McDonald and Carlisle McDonald, defendants in the above entitled cause, pending in this court, reside out of the said State of Michigan and in the State of Ohio, and on motion of Carpenter & Hannan, solicitors for Complainants, it is ordered that the said defendants Parker McDonald and Carlisle McDonald do appear and answer the bill of complaint filed in the said cause within four (4) months from the date of this order, else the said bill of complaint shall be taken as confessed, and further that this order be published within twenty days from this date in the *MICHIGAN FARMER*, a newspaper printed in said County of Wayne, and be published therein for six weeks in succession.

WM. JENNISON, Circuit Judge.
A true copy:
WILLIAM P. LANE, Deputy Register.
CARPENTER & HANNAN,
Complainants' Solicitors.
HENRY A. HAIGH, of counsel.

ON December 6, 1872, Louis Feys and Mari Feys gave to William Meulenbroeck a mortgage on lot four of Crane & Wesson's section of the Forsyth farm, being in section fourteen of said farm, in Detroit, Wayne County, Michigan. Said mortgage was recorded in the Register's office for said County of Wayne, on December 9, 1872, in liber 88 of mortgages, on page 435. It was assigned June 23, 1881, to James J. Atkinson. There is now due on it \$603. Notice is hereby given that by virtue of the power of sale in said mortgage, I shall on the **FOURTH DAY OF APRIL, 1884**, at 12 o'clock noon, sell said premises at public venue at the Griswold street entrance to the City Hall, in Detroit, the place for holding the Circuit Court for said County of Wayne.

JAMES J. ATKINSON.
Detroit, January 6, 1884.



50 NEW Style Chromo Cards with your name in fancy type, 10c. 11 packs and this Elegant Locket, (suitable for lady or gent.) \$1. 5 packs and beautiful imported silk handkerchief, 50c. Illustrated list and sample book for agts. 25c. **NEPTUNE CARD CO., New Haven, Ct.**

HOMES IN TEXAS & ARKANSAS

Low prices. Long credit. Rich agricultural and grazing lands, producing wheat, rye, oats, corn, cotton, grasses and all the choice fruits, near schools, churches and railroads. Cheap land excursions every month. For maps of Texas, Arkansas, Missouri and Kansas, with all information address **J. B. FRAWLEY, Pass. and Land Agent Missouri Pacific Ry. Co., 109 Clark Street, Chicago Illinois.**

ji-ly

The Poultry Yard.

Feeding Young Chicks.

Young chicks cannot procure green food at this season, and consequently are subject to constipation which sometimes destroys a whole brood. The chief trouble is feeding raw soft food. This is not injurious, however, if it consists of all that is required for the growth of the chicks. In the early stages the feathering is very rapid, which accounts for the constant appetite of the chicks, which keep their crops full all the time. But there is such a thing as starving the chicks even in the midst of plenty, and that is the policy often pursued by those who feed liberally but not the right kind. Corn meal certainly serves to create heat in the chicks, a very essential matter, for they should be warm and comfortable, but the chick in its first stages demands material for bone and feathers, and in order to eat enough corn meal to supply the natural want in that direction the internal organs are impaired and the chick droops. Neglect will so retard a chick that it cannot recover. The loss of a single meal will often do this, and hence the necessity for regularity in feeding. The demand for the production of bone and feathers is mostly for lime, and this should be accompanied by iron and phosphoric acid. Lime may be given in the shape of bone meal, ground fine, oyster shells, or as old mortar pulverized. Even slaked lime is appropriate for use, and the food also contains traces of it. Iron exists in all vegetation in minute quantities, but a little copperas solution to the drinking water will supply all that is needed.

The best method of feeding is to allow nothing the first twenty-four hours. Then give hard boiled egg for a day or two. It is well after that time to mix together one part corn meal, two parts ground oats, and one part wheat bran (ship stuff) moistened with boiling water to a crumbly dough. Once and a while give mashed potatoes, and occasionally vary with a little hard boiled egg, chopped cabbage, boiled turnips, etc., keep warm and dry, feed regularly, and keep them up on stormy days.—*Farmer and Garden.*

Sand Bath for Fowls.

Fowls must have a sand-bath. It is their sponge, towel, tooth brush and dressing comb all in one. How would you feel, my dainty lady, if denied all your toilet appendages and compelled to go day after day unwashed and unkempt and to wear soiled and rumpled garments? Even so suffers Mistress Biddy without her daily dust-bath, and Nature, that infallible teacher, directs her to the nearest and most convenient place for such a renovation of the skin and feathers. If no other soft, sandy, and loamy earth is at hand you may be sure she will use your flower bed without regard to consequences. She may learn to hide at your approach, taught by a blind instinct that you are her enemy, but the idea that you begrudge her the dearest delight of her

hapless days—the use of the free soil for her bodily needs—in one that poor Biddy's small brain can never comprehend. Descend to her level, then, yourself; consider her wants and supply them without delay. So shall the "irrepressible conflict" of Biddy's wishes and yours in regard to the flower beds be amicably settled, and both of you hereafter live in peace. Have a cart full of loam, sand, and road dust, and a sprinkling of ashes, charcoal, and sulphur placed under cover where your fowls can sun themselves, dust their bodies to the destruction of annoying parasites, and scratch and bury themselves by the hour together whenever the wish may seize them, and you may lay the flattening unction to your soul that the beatitude which refers to the "quality of mercy" may be applied to yourself then, if never before.—*Poultry World.*

THE *American Cultivator*, speaking of the likelihood of the poultry business being overdone, says: "One of the largest and wealthiest establishments in Boston has offered forty cents per dozen the year round for 150 dozen fresh eggs per day—only 1,050 dozen per week—but every one of them must be known to be absolutely fresh, beyond all question. To suppose they are so, or to replace a stale one with forty good ones, will not do, and yet, not a poulterer has been found who dares tackle the contract and give bonds for its faithful performance. It would, perhaps, be an easy matter to accomplish it at most seasons of the year, but in the fall, when your fowls had been killed, or would not be laying if alive, and before your pullets had commenced to lay much, it would require a larger flock than any one man ever kept since Noah's lone pair first stepped out of the ark."

SCALY legs, or "scab," is the work of a minute parasite, and is easily removed. Mix a tablespoonful of coal oil with half an ounce of lard, and rub it well into the legs. Do this twice a week for two weeks, and the legs will be clean. The coal oil changes the color to a white for a little while on some fowls, but, if preferred, a tablespoonful of sulphur may be mixed with the lard instead of the coal oil, which will remove the scale without discoloration; but neither remedy should be used in damp weather.

THE *Farmer's Advocate*, (Canada) gives the following recipe for roup pills, which it endorses as as good as any sold: "Equal parts of asafetida, hyposulphite of soda and salt, mix well, and give a pill twice a day. Wash the beak and nostrils with a strong solution of copperas, and put a little copperas water in that used for drinking."

A GREAT poultry farm at Rushford, England, has failed, and the entire stock of over 3,000 fowls is offered for sale. The *N. Y. Tribune* comments that the profits from the poultry business seems to diminish in proportion, as the fowls are multiplied in number beyond a very limited number.

REAL ESTATE FOR SALE

STATE OF MICHIGAN, ss. COUNTY OF WASHTENAW,

In the matter of the estate of Clara L. Stone and Willie J. Stone, minors. Notice is hereby given, that in pursuance of an order granted to the undersigned, guardian of the estate of said minors, by the Hon. Judge of Probate for the County of Washtenaw, on the tenth day of November, A. D. 1883, there will be sold at public vendue, to the highest bidder, on the premises, in the Township of Sumpter, in the County of Wayne, in the State of Michigan, on WEDNESDAY, THE NINTH DAY OF APRIL, A. D. 1884, at 12 o'clock noon of that day (subject to all encumbrances by mortgage or otherwise existing at the time of the sale) the following described real estate, to wit: All that parcel of land lying and being in the township of Sumpter, County of Wayne and State of Michigan, described as beginning on the southwest quarter of section six in said township, seventy-two rods north of the southwest corner stake of said section, thence running north to the south line of lands formerly owned by Henry Willard, being the northwest fractional quarter of the southwest quarter of said section, thence east on said line twenty rods, more or less, to the west line of lands formerly owned by James Sherman, thence south eight rods along said Sherman's line, thence west twenty rods, more or less, to the west line of said section, and to the place of beginning, being one acre of land, more or less.

Dated February 21, 1884.

WILLIAM P. STONE, Guardian.

MORTGAGE SALE.—Whereas, default has been made in the conditions of a certain mortgage made and executed the first day of June, in the year 1880, executed by John T. R. Brown and Sarah H. Brown his wife, Robert H. Brown and Margaret E. Brown, his wife, and Alfred Bunclick and Sarah Bunclick, his wife, all of Detroit, Wayne County, State of Michigan, to William J. Linn, of the same place, which said mortgage was recorded in the office of the Register of Deeds of the County of Wayne, in liber 159 of Mortgages, on page 124, on the 29th day of June, in the year 1880, at 2:30 o'clock, p. m. Said mortgage was duly assigned to John H. Toepel and Babetta Toepel, of Detroit, Wayne County, State of Michigan, on the twentieth day of January, 1882, and said assignment was recorded in the office of the Register of Deeds of the County of Wayne, in liber 20, assignments of mortgages, on page 242, on the 21st day of January, A. D. 1882. And whereas, there is now due and unpaid on said mortgage, under the terms thereof, the sum of seven hundred and fifty-eight and 36-100 dollars, of which thirty-three and 44-100 dollars are the taxes paid by the assignees of the mortgage, which, by the terms of this mortgage constitute part of the amount due, and the further sum of twenty-five dollars as an attorney fee, stipulated for in said mortgage, and, whereas, no suit or proceeding at law or in equity has been instituted to recover the debt secured by said mortgage, or any part thereof; now, therefore, notice is hereby given that by virtue of the power of sale in said mortgage contained, and of the statutes of the State of Michigan in such case made and provided, the said mortgage will be foreclosed by a sale of the premises therein described, at public auction, to the highest bidder, at the east door of the City Hall in the City of Detroit in said County of Wayne, that being the place where the Circuit Court for the County of Wayne is held, on the second day of April, A. D. 1884, at ten o'clock in the forenoon of that day; which said premises are described in said mortgage as follows, to wit: "All that certain piece, parcel or lot of land situate, lying and being in the City of Detroit, County of Wayne and State of Michigan, known and described as lot numbered three hundred and forty-four (344) of Johnston's subdivision of Private Claim numbered forty-four (44), Lafontaine Farm, on the east side of Sixteenth street."

Dated January 2d, 1884.

JOHN H. TOEPEL,

BABETTA TOEPEL,

Assignees of Mortgagees.

CARPENTER & HANNAN,
Attorneys for Assignees.

ON the 20th day of July, 1875, Jeremiah Calnon gave to Nicholas Woods, Catherine Woods and Mary Ann Woods, a mortgage on four undivided fifth parts of the following pieces or parcels of land, situate, being and lying in the City of Detroit, Wayne County, Michigan, and described as lot number five (5) and fractional lot number six (6) in block forty-nine (49) of the Forsyth or Porter Farm, so-called, on the south side of Porter street, between Fifth and Sixth Streets. Said mortgage was recorded in the Register's office for the County of Wayne, Michigan, in liber 97 of mortgages, on page 409, on July 20, 1875. The interest of said Mary Ann Woods therein was assigned on May 2, 1881, to said Nicholas Woods, who, with said Catherine Woods, assigned said mortgage to William F. Atkinson and James J. Atkinson on the 18th day of December, 1883. There is now due on said mortgage \$329. Notice is hereby given that by virtue of the power of sale in said mortgage, we shall, on the THIRD DAY OF APRIL, 1884, at 12 o'clock noon, sell said premises at public vendue at the Griswold street entrance to the City Hall in Detroit, the place for holding the Circuit Court for the County in which said premises are situated.

WILLIAM F. ATKINSON,

JAMES J. ATKINSON.

Dated Detroit, January 2, 1884

For the Michigan Farmer.

LIGHT AND VISION.

There are two prominent theories as to the explanation of light. The Newtonian theory is that light is composed of very minute particles or corpuscles, far too minute to be discovered by the human eye, thrown off by a luminous body. The other theory is the undulatory vibrations of a luminous substance transmitted through a rarified medium called ether. The latter theory seems to have been very generally accepted as nearer correct. Light travels, when unimpeded, in straight lines, in every direction, with incomprehensible velocity. The sun is some ninety-five millions of miles from the earth. Later computations make it less. Light comes from that source in eight minutes, traveling at the rate of 200,000 miles in a second of time. For convenience, light is divided into rays, beams and pencils. A ray is a single line of light; this, of course, is only imaginary. A beam is a bundle or collection of rays; a pencil is a collection of convergent rays as they are brought to a focus; diverging as they emanate from the sun, candle or any luminous body, increasing from a certain point. The action of light upon various bodies is truly wonderful and very pleasing to study. Before I commence the analysis of light, I will mention some of the results produced by its action upon gaseous and solid matter. In mixing chlorine and hydrogen gases no chemical change will take place while the mixture is excluded from light, but when brought in contact with a bright light they combine. When a solution of nitrate of silver is exposed to light it turns dark immediately; this effect is the foundation of the art of photography. One of the most wonderful effects produced by light is its chemical action on the vegetable kingdom; under its agency plants have the power to decompose the carbonic acid gas of the atmospheric air. Through this action, plants separate the carbon from the carbonic acid gas, which they retain for their growth; at the same time the oxygen is thrown out into the atmospheric air. Plants live upon the poisonous gas we exhale, while we are kept alive by what plants refuse to retain, oxygen gas, the life-giving element of atmospheric air. There is an idea in relation to the chemical action of light upon the leaves of plants I will mention in this connection, that has never been noticed by scientists; it came to me while studying prismatic colors several years ago. It is this: That the action of light upon the leaves of plants, oxidizing their color, always changes their tints according to the prismatic scale. For instance, the leaves on a maple tree in mid-summer are green, an intermediate color from blue and yellow; toward autumn it changes to yellow, a primary color; then orange, another intermediate color from yellow and red; lastly, it changes from orange to red, a primary, and the last color reflected by light. The reader will remember seeing some of these tints at sunset, the last color reflected being red, darkness follows. There is a great deal that might be said in

relation to the curious and useful effects of light, but for the present what I have written will have to suffice.

I will now proceed with the analysis of light, then follow with a few words on the anatomy and physiology of the eye, showing how vision is produced through the agency of light. When a ray of light falls perpendicularly upon any transparent medium, such as water or glass, it passes through in a straight line; but if it falls at an angle or in an oblique direction, it is refracted or bent from a straight line. When a ray of light passes from a rarer into a denser medium, as from air into water, it is bent toward a line perpendicular to the surface; but when it passes from a denser into a rarer medium the reverse is produced. Different mediums have different refractive powers; the denser the medium the greater is the refractive power. There are some beautiful and instructive lessons to be learned from the reflection of light. When rays of light pass through a medium unchanged, it is transparent; partly changed, it is said to be semi-transparent or translucent; but when no light passes through, it is opaque. Opaque bodies may absorb the rays of light or reflect them. When light strikes a highly polished surface in an oblique direction, it is reflected off in a similar angle. The line from where light emanates to where it is reflected is called the angle of incidence; the line from the reflecting body to the eye is called the angle of reflection; these angles are always equal. By this method of explanation we can readily understand how our image is so perfectly reflected in a mirror. The light reflected from our bodies does not pass through the mirror, but coming in contact with the polished surface of the amalgam on the back of the mirror, it is reflected back in straight lines, forming a perfect image of the person reflected, providing there are no imperfections in the glass. The amalgam on the back of a mirror is composed of a combination of quicksilver and the metal tin. The image in the mirror seems to stand as remote from the glass as the individual whose image is reflected, thus proving that the angle of incidence is equal to the angle of reflection. White light is composed of many colored rays; this fact has been proven by the prism. A prism is a triangular piece of glass, or some other transparent body used by scientists to separate the colored rays composing a ray of sunlight. According to the old or Newtonian theory, light was composed of seven primary colors, viz: violet, indigo, blue, green, yellow, orange and red; while the newer or Brewster theory gives only three primary colors, viz: blue, yellow and red. It is a fact that all the intermediate colors are combinations of these; for instance, red and blue produce violet; blue and yellow produce green; yellow and red produce orange color; these results are of practical importance to a painter. What I know of blending colors for landscape painting I learned from the rainbow when quite a lad. In the prismatic colors there are different degrees of illuminating powers; for instance, when they are thrown upon printed paper, one color will render the words distinct, while others will cast a blur over them. There are also different degrees of heat in these colored rays. The red ray, being the least refrangible, contains the greatest amount of heating power; this power is lessened as the approach is made to the violet color. There is an instrument called the spectroscope, being a combination of the spectrum with the ordinary telescope, used to ascertain the chemical character of the sun and other luminous orbs. White and black are only relative terms; not properly colors; the former is pro-

duced by the reflection of all the colored rays, while the latter is the result of the absorption of all and the reflection of none. The explanation why flowers, or any colored substances, are red, blue and yellow, is the absorption of all colored rays, and the reflection of the color in question; if variegated, then two or more colors are reflected at the same time. "Accidental colors" will require a few words of explanation. Suppose I should place the prismatic colors in the form of a circle, just one-half of the seven colors, counting from any one, that would be its accidental color. I will further demonstrate this fact; should any one wearing dark spectacles take them off suddenly every thing would appear white to them, that being the accidental color of black, and *vice versa*. If we look for a time at a red-hot fire, and then look away from it, everything will seem to be tinged with blue or a bluish-green, which hue is the accidental color of red.

I now come to treat of the effect of light upon the human eye, and in order to do this satisfactorily a simple lesson on the anatomy of the human eye is necessary. The ball of the eye is nearly round. It has four coats; the conjunctiva, a membrane lining the eye lids; sclerotic, the hard, grayish-white coat forming the white of the eye; the choroid coat underlies the sclerotic; the retina is the innermost coat of the eye. Upon this delicate membrane are the expanded fibres of the optic nerve, forming a net-work and arrangement of nerve cells. There is in the front portion of the internal eye a liquid called the aqueous or watery humor; the iris, a circular curtain, the same which gives color to the eye, divides this humor into a front and back chamber; the crystalline lens lies immediately behind the back chamber mentioned. The use of this lens is to concentrate the rays of light upon the retina, to render vision perfect. In the rear of this lens is the vitreous humor, forming about four-fifths of the bulk of the eye. As I have mentioned some of the principal parts of the eye, next comes how light produces vision. In the first place, why have we two eyes when we may see distinctly with one? It is to increase the light, or to take in more of the light reflected from the object looked at, making it appear more distinct. There is a small opening in the front of the eye called the pupil; around this orifice is a curtain named the iris. Rays of light passing in through the pupil, are converged or drawn to a focus by the lens, which produces a perfect reflection upon the retina of any object in view. In case there is too much light passing into the eye, the curtain or iris contracts or narrows the pupil in order to prevent a blur, the result of too strong light. In case light is too feeble to render an object distinct, this curtain relaxes, thus enlarging the pupil to admit all the rays of light possible, in order to stimulate the retina through the optic nerve, to reflect a perfect image. The shape of the eye has much to do in perfecting vision. When the cornea or front of the eye is too flat or too rounding, the vision is not perfect; this I will more fully explain. When the cornea is in a normal condition, the image by the converging rays of light, will strike perfectly upon the retina, producing natural vision; but if the cornea is too convex or too prominent, the image of a distant object is formed before it reaches the retina; consequently it is not seen distinctly. This defect is called "near-sightedness." Unfortunately, this is too prevalent throughout our country, owing to the cramming system of our schools by overtasking the pupils. In case the cornea is too flat, there is a tendency in the lens to throw the image beyond the retina, making vision imperfect. This is termed "far-sightedness," a difficulty common to old people. This defect is usually owing to the drying up

of the humors of the eyes, producing the flattening of the cornea, already referred to. There is a wonderful display of God's wisdom in the completeness of the retina. To think that enormous objects, miles of landscape, may be accurately pictured within a small circle, less than half an inch in diameter, is almost incredible, nevertheless it is an established fact. There are anomalous conditions of the senses of taste, smell and hearing, partial and complete; the same can be said of the eye. There are eyes insensible to certain colors; this defect is called "color blindness." A gentleman once mistook a pink color for a pale blue; full red for green. In the transactions of a philosophical society is mentioned the case of a shoemaker, who could only recognize ripe cherries by their size and shape, not by their color. An amusing account is given of a tailor who repaired a black garment with crimson; put a patch of the same color on the elbow of a blue coat. Why the retina through the net-work of the optic nerve, is not susceptible to all colors, is a difficult problem to solve. The fact of color-blindness, has led railroad men to examine employees, before engaging them for responsible positions, as to their knowledge of colors. Color-blindness might lead an engineer to commit a fatal mistake by mistaking the color of a signal.

It may be interesting to say a few words in relation to comparative vision. Scientists have not discovered eyes in the lower order of animals. Nearly all insects have eyes, either while in the larva or perfect state. Some are furnished with two kinds of eyes; those situated on the sides of their heads are called compound eyes, while those on the top (mostly three in number) are called stemmata. These eyes are often very numerous, running from 50 to 20,000. The eye of a fish is peculiarly adapted to see in water. While the cornea is flat, the crystalline lens is round; one apparent defect is remedied by another, thus rendering vision in water perfect. The eyes of birds, comparatively speaking, are much larger than those of animals. The chief peculiarity in the eye of a bird is its capacity to adapt itself to long or short ranges of vision; to dense or rare mediums of atmospheric air, seeing quickly all while soaring to an enormous altitude, as when on the ground devouring its prey. It is generally supposed that eagles and vultures discover dead carcasses by the sense of smell. This has been proven incorrect. They are guided by the acuteness of their vision. A naturalist completely deceived a vulture by placing a stuffed deer in a field. The bird was not satisfied that it was a deception until it had picked the threads loose that held the hay inside the dry skin. A dead hog was once thinly covered with hay, in the hot month of July. The numerous vultures flying over did not discover it, while dogs, who are guided by the sense of smell, soon found and devoured it. The eyes of night-birds and animals have very large pupils, calculated to take in the few rays of light reflected at night, thus enabling them to see their prey distinctly. Nocturnal birds and animals mostly sleep during the daytime, or remain in a stupor condition; this is owing to the extremely sensitive nature of their eyes to a bright light. Take a cat for instance, into the sunlight, and its eyes commence blinking immediately, thus demonstrating the omniscience of God in giving the delicate, sensitive eye of a nocturnal animal or bird a natural protection.

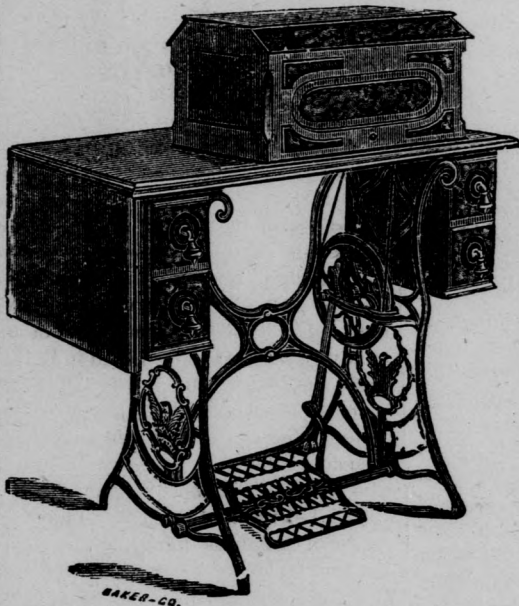
In conclusion, reader, save your eyes. They are delicate organs, more easily injured than restored. Do not overtask them in your thirst for knowledge. Never read in a too strong or feeble light. When your eyes begin to feel irritated by reading, give them rest.

R. R.

Hood's Sarsaparilla makes the weak strong

THE IMPROVED SINGER SEWING MACHINE!

The "Michigan Farmer" One Year and a Machine For Only \$18.00!



We have made arrangements to have manufactured for us a large number of one of the best Sewing Machines ever in use, which we shall sell at about one-third usual prices. Each machine will be nicely finished with a Box Cover, a Drop Leaf Table, and Four Drawers, and will contain a full set of the latest improved attachments. This illustration is an exact representation of the Machine we send out.

The cut below represents the "Head" or machine part of the Sewing Machine. All parts are made to gauge exactly, and are constructed of the very finest and best material. It is strong, light, simple and durable. Does to perfection all kinds of sewing and ornamental work that can be done on any machine.

Each machine is thoroughly well made and fitted with the utmost nicety and exactness, and no machine is permitted by the inspectors to go out of the shop until it has been fully tested and proven to do perfect work, and run light and with as little noise as possible. This machine has a very important improvement in a Loose Balance Wheel, so constructed as to permit winding bobbins without removing the work from the machine.

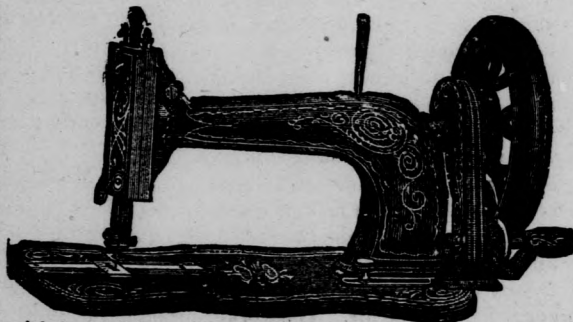
THE LOOSE BALANCE

WHEEL is actuated by a solid bolt passing through a collar securely pinned to the shaft outside of the balance wheel, which bolt is firmly held to position by a strong spiral spring. When a bobbin is to be wound, the bolt is pulled out far enough to release the balance wheel and turned slightly to the right or left, where it is held by a stop-pin until the bobbin is filled. Where the machine is liable to be meddled with by children, the bolt can be left out of the wheel when not in use, so that it can not be operated by the treadle.

The Thread Eyelet and the Needle Clamp are made SELF-THREADING, which is a great convenience to the operator.

THE BALANCE WHEEL is handsomely finished and nickel plated.

The IMPROVED TENSION and THREAD LIBERATOR combined adds greatly to the value of this machine.



ALL THE STANDS HAVE The New Driving Wheel.

This Driving Wheel is the invention of John D. Lawless, secured by patent, dated Feb. 7, 1882, and is claimed to be the best device yet invented, being the simplest, easiest running, and most convenient of the many that have been tried. It can be easily adjusted and all wear taken up by turning the cone-pointed screw. It is the only device operating on a center that does not interfere with other patents. Dealers who wish to sell these machines will appreciate this fact.

The Stands have rollers in legs and the Band Wheels are hung upon self-oiling adjustable journals. Each stand is run up by steam power after it is set up until it runs very light and smoothly.

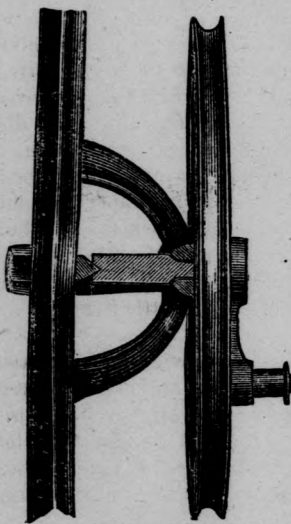
We have selected this style and finish of machine as being the most desirable for family use.

We furnish the Machine complete as shown in above cut, and include the following attachments, &c. One Johnson's Foot Ruffler, one set Hemmers one Tucker, one Foot Hemmer or Friller, one package Needles, six Bobbins, Screw Driver, Can of Oil, Extra Check Spring, extra Throat Plate, Gauge Screw, Wrench, Instructions.

Each Machine is Guaranteed as represented and to give satisfaction, or it may be returned and money refunded.

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JOHNSTONE & GIBBONS, Publishers MICHIGAN FARMER,
44 Larned St., West, Detroit, Mich.



Apiarian.

Extremes Among Bees.

Frank Benton, now at Munich, writes the *Bee-Keepers' Magazine* about two races of bees he found during his stay at Ceylon, which he speaks of as the "Tom Thumb among Bees," and the "Giant Bees."

I have with me a small box containing some very curious little bees with their equally curious queen and combs. These bees, though belonging to the numerous family apidae, are only distant cousins of our honey bees, not being in the genus *Apis*, but that known as *Trigona*. The worker of these bees is three-sixteenths of an inch long, has a large head and a small blunt abdomen, the wings being longer than the latter. It is shiny brownish black, with one light colored ring under the wings and the whole under part of the abdomen whitish in color. It is stingless, but the natives say it enters one's ears, and therefore wrap up their heads when approaching one of the nests. I gave no heed to this caution, yet got none in my ears. The workers are very active and gather pollen and honey. It is really amusing to see them come in laden with pollen, the pellets being large in proportion to the leg of the bee or even to its body. The strength of the individual bees is wonderful—far greater, I believe, than that of any ant of corresponding size. I have seen one of them drag along with apparent ease a dead hornet which was very large, I should think at least fifty times as great as itself. The queen is reddish-brown, or leather colored, and, like the queen of some kinds of ants, has an immense abdomen, her wings being wholly inadequate to the task of lifting her body into the air. The worker-brood cells of this bee are about half the size, and of the shape, of short, plump grains of wheat, and are placed in irregular bunches with passages between; the pollen cells and the honey cells are fully as large as good-sized peas, but each kind forms a group of its own.

I found these bees in a small hollow tree in the jungle.

They had built down from the hole of the tree a tube about a foot long, a half inch in diameter, and composed of particles of wood glued together with some resinous gum. Through this tube the bees entered, and it evidently served as a protector against some of their enemies. A nest of ants was located farther down in the same tree, but I noticed that these insects, so ravenous in tropical countries, avoided this tube. Another colony of these bees which I found lodged in a hollow iron pillar in front of a village inn, had built no such tube, the entrance hole being just large enough to admit one bee at a time.

It was, unfortunately, only just before I was to re-embark with the Cyprian and Holy Land bees I had brought with me, to continue my journey to the Dutch East Indies, that I gained any satisfactory information about the giant bees. I had

sought them in the forests and everywhere I had been, had made inquiries among the natives, but had not found them; then I visited the government museum, and, though none were to be seen there, one of the gentlemen connected with it, introduced me to Mr. Wright, a retired planter and a lover of flowers, birds, and insects, who had often seen bamera, the largest bee of Ceylon, which I fully believe is *apis dorsata*. He told me they were not often found near the coast, but generally built their combs upon the branches of trees in the primitive forests. He had, however, been called upon to remove from the upper part of the hotel window in Colombo—the principal seaport of Ceylon, a large nest of these bees. I remember having read, also, that a swarm of them once took up quarters in a coal shed in Point-de-Galle, another seaport town. Thus they do enter occasionally the lower sea-coast regions, and sometimes live in an inclosed space. "Why," said my informant, who is one of the most respected and influential citizens of Ceylon, "I have seen combs of bamera hanging down fully five feet from the branches of the trees. The natives climb into the branches of the trees and cut off the combs and let them down with ropes, and I have seen them load thirty men with the honey and wax taken from one bamera tree!" Again he remarked: "When they swarm the air is black with them, and I have seen a stream of them as long as from here to the museum." The distance indicated was nearly half a mile!

MRS. L. HARRISON, in the *Prairie Farmer*, says: "When it is time to remove bees from the cellar, the stands they are to occupy should be prepared beforehand. They should be higher at the back, inclining to the front; if the height of two bricks are at the back, one will answer for the front. This inclination to the front is an important matter; it facilitates the carrying out of dead bees and debris from the hive, the escape of moisture, and last, and most important item, bees will build their comb straight in the frame instead of crosswise of the hive, and their surplus comb in boxes correspondingly. If a few hives are removed near the close of the day and put in different parts of the apiary, the danger from swarming out is avoided, for the bees will become quiet before morning, and being far apart will not mix up when they have their play-spell. The success of bee-keeping depends upon the faithful performance of infinite little items."

BEES that have been wintered in cellars, or special repositories, are often injured by being removed too early to their summer stands. It would be better to let them remain, and lower the temperature during warm days with ice, until warm weather has come to stay.

WANTED.

A good farmer to take a farm in Monroe County Mich. Must be a man that understands stock and the wife a gilt-edge butter-maker. Stock and tools furnished. References required. Address m11-4t B. E. BULLOCK, TOLEDO, O.

STATE OF MICHIGAN.—The Circuit Court for the County of Wayne. In Chancery.

At a session of said Court, held at the Circuit Court room in the City of Detroit, on the seventh day of February in the year one thousand eight hundred and eighty-four. Present: Hon. John J. Speed, Circuit Judge. *Anna K. Scheisler vs. Michael Scheisler*. It appearing in due form by affidavits filed in said cause that said defendant is a resident of the State of Michigan, that the subpoena issued in said cause was returned in due time unserved, by reason of his continual absence from his place of residence, on motion of Atkinson & Atkinson, solicitors for said complainant, it is ordered that said defendant, Michael Scheisler, appear in said cause and answer the bill filed therein on or before May 7th, 1884, and that said order be published in the *MICHIGAN FARMER*, a newspaper printed in said county once a week for six successive weeks and that such publication be commenced within twenty days from this date. JOHN J. SPEED, Circuit Judge.

Dated February 7th, 1884.

A true copy:

WM. P. LANE, Deputy Register in Chancery.

STATE OF MICHIGAN.—In the Circuit Court for the County of Wayne. *Belle Sherman vs. Sylvester Sherman*. In this cause it satisfactorily appearing to said Court from the affidavits of Belle Sherman and J. W. Fletcher now on file in said cause that the said defendant Sylvester Sherman is a resident of the State of Michigan but whose present place of abode is unknown, on motion of J. W. Fletcher, solicitor for complainant, it is ordered that the said Sylvester Sherman appear, plead, answer or demur in this cause within three months from the date of this order or that in default thereof the bill of complaint in this cause be taken as confessed against him. Ordered further that a copy of this order be published in the *MICHIGAN FARMER*, a newspaper published in said County at least once in each week for six successive weeks succeeding the date hereof. WILLIAM J. CRAIG, Circuit Court Commissioner, Wayne County, Michigan.

Dated Detroit, February 20th, 1884.

THE SUPERIOR COURT OF DETROIT. In Chancery. *Edward G. Shipley, Complainant, vs. Susannah Shipley, Defendant*.

It satisfactorily appearing to this court by affidavit on file that the defendant, Susannah Shipley, is not a resident of this State, but is a resident of the Province of Ontario. On motion of Robert Laidlaw, solicitor for complainant, it is ordered that the said defendant, Susannah Shipley, cause her appearance to be entered herein within four months from the date of this order, and in case of her appearance that she cause her answer to the complainant's bill of complaint to be filed, and a copy thereof to be served on said complainant's solicitor within twenty days after the service on her of a copy of said bill and notice of this order, and in default thereof said bill be taken as confessed by the said non-resident defendant, and it is further ordered that within twenty days after the date hereof the said complainant cause a notice of this order to be published in the *MICHIGAN FARMER*, a newspaper printed, published and circulating in the County of Wayne and State of Michigan, and that said publication be continued therein at least once in each week for six successive weeks, or that he cause a copy of this order to be personally served on said non-resident defendant at least twenty days before the above time prescribed for her appearance.

J. LOGAN CHIPMAN,

Judge of the Superior Court of Detroit.

ROBERT LAIDLAW,
Solicitor for Complainant.
DETROIT, March 11th, 1884. m11-6t

THE SUPERIOR COURT OF DETROIT. In Chancery. *James Amor, Complainant, vs. Emma A. Amor, Defendant*.

It satisfactorily appearing to this Court by affidavit on file, that the defendant, Emma A. Amor, is not a resident of this State, but resides in the city of Hamilton, in the Province of Ontario. On motion of Robert Laidlaw, Solicitor for complainant, it is ordered that the said defendant, Emma A. Amor, cause her appearance to be entered herein within four months from the date of this order, and in case of her appearance that she cause her answer to the complainant's bill of complaint to be filed, and a copy thereof to be served on said complainant's solicitor within twenty days after service on her of a copy of said bill and notice of this order, and in default thereof said bill be taken as confessed by the said non-resident defendant. And it is further ordered that within twenty days after the date hereof the said complainant cause a notice of this order to be published in the *MICHIGAN FARMER*, a newspaper printed, published and circulating in the County of Wayne, State of Michigan, and that such publication be continued therein at least once in each week for six successive weeks, or that he cause a copy of this order to be personally served on said non-resident defendant at least twenty days before the above time prescribed for her appearance.

J. LOGAN CHIPMAN,

Judge of the Superior Court of Detroit.

ROBERT LAIDLAW,
Solicitor for Complainant.
DETROIT, March 11th, 1884. m25-6t

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