

THE GIRL IN A CALICO DRESS.

Though queens of society try as they will to dazzle and charm us by dressing to kill, they can not look over, we have to confess, as sweet as the girl in a calico dress.

No framework of satin, silk, jewels and lace can set off her beauty and grace like a calico dress of neat pattern and shade. That her own willing hands have so tastefully made.

There's something so wholesome, so homelike, so clean, so honest and useful, so modest of mien in a calico dress that its wearer, we know, Partakes of its virtues and in them will grow.

No tailor-made girl, be she ever so smart, And decked in the fashion of dressmaking art, Can hold up a candle with any success To the sensible girl in a calico dress.

All praise to the girl in a calico dress: A marriage with her is a certain success. A kitchen or parlor—each one in its place—She, like Cinderella, will equally grace.

—H. C. Dodge, in Detroit Free Press.

MIRIAM.

The Romance of Heatherleigh Hall.

BY MANDA L. CROCKER.

COPYRIGHT, 1889.

CHAPTER I.

OWN to my feet she is sitting, this pale, sweet woman, clad in the suggestive black crepe. The dark folds lie softly against the slender throat in a caressing manner, and they remind me, as I look at her, of a pair of dimpled, baby arms, that never more will cling to the proud neck.

Oh! yes; and more than that memory is hidden within the folds of that black gown. There is a triple story of bereavement and anguish of soul keener than that felt for the dead, but, as yet, I do not know it quite all.

She is a mystery to me, and I fail to comprehend her many times, although I know her history to be crowded with incidents sad and tragical.

The afternoon sun comes through the lattice in bright golden bars, and falls lovingly on her dark hair, revealing to me that it is not really black, as I had thought, but of a deep brown color, but she is not conscious of the sunshine.

The scent of the fragrant roses comes up from the little garden below, with the breath of carnations and violets growing plentiful there, but her soul is shut against all that is beautiful in nature to-day.

She is so strange and lives within herself, in such an atmosphere of deep sorrow, that I have never been able to penetrate it and understand the heart throbbing out its existence to the music of its dirges.

I would love to talk freely to her this afternoon, but am at a loss to know how to begin. I am, at best, a poor comforter; my heart is sympathetic enough, but its emotions fail me in words. In this, as in many other things, I am very unfortunate, and the good that I would do is never realized. But finally I venture: "Miriam, would you enjoy a drive on the beach, or shall it be a stroll in the woods to fill up this remaining piece of a day?"

Out there beyond the trees, and swelling shoreward, lie the blue waters of the bay, and beyond them the broad Atlantic. There is a lovely drive along the sands, and the weather is glorious, and this is why I offer myself and pony phaeton to her, as accessories of a pleasant afternoon by the sea. But I have missed it again, and my suggestion grates on her optional pleasure.

Slowly the great dark eyes are lifted to mine in sorrowful negative, and I know I have swept an irresponsive chord.

I am answered further by a doleful shake of the head; but she says no word. Small need, I understand her.

She crumches a letter in her hand savagely—a letter addressed to me, yet more hers than mine—as if to remind me that its contents are all she has room for in her thoughts, and that a drive on the sunny sands would only mock the shores of nothing to which her soul drifts this afternoon.

Then she gets up as if I have annoyed or disturbed her by my question, which I presume I have, and goes down the walk to the little wicket opening out to the clustering trees in front of my cottage. The great



SO PLEASANT AND PEACEFUL.

white lilies that droop either side the way are hardly paler than she, or more innocent.

The wind coming up freshly from the water catches at her gown, and tosses her long loose curls until she shivers. Perhaps it whispers to her of her far away desolate English home which stretches out its arms, figuratively, and begs for her presence; or treats the proud, beautiful face to shine once more within its great manorial halls. If that is what the winds and waves are saying, their petition is met, doubtless, with a cruel rebuff.

Presently she comes back to me, but, instead of sitting down on the ottoman at my feet, as I half expected her to do, she drops the letter into my lap, kisses me hungrily, whispers brokenly: "I can never do it never!" and goes up-stairs. I make no answer; there are no words left me adequate, neither does she look for a reply.

I take up the letter, and although I know it by heart I must needs run over it again. It has come all the way from Hastings, that beautiful city by the sea, in merrie old England, and in a call from desolated Heatherleigh Manor. "Do I know aught of Miriam Percival Fairfax? If so, tidings of her will be thankfully received. The grand

old hall is waiting at her disposal, and the death of Sir Rupert Percival and his written request leaves her the sole legatee." I am not allowed to answer the letter; Miriam will not have it so, and Heatherleigh is nothing to me. Of course I have told her she had better go, but with a look of horror in those haunting eyes of hers, she has refused emphatically, as whispering with white lips she tells me that she "hates her ancestral halls," and "that I have no idea what I ask of her."

Perhaps I don't, and the deep aversion ranking in her soul toward her birthplace comes hissing through the white teeth, and effectually silences me in protesting further. She came to me two years ago, sad and sorrowing, from the newly-made graves of husband and child. "Remember," she said to me once, "that my husband and son sleep where the shadows of Heatherleigh fall not on them. My poor, brave Arthur could not rest well if they did, and my little one has forgotten, on his dreamless pillow, the curse that turned him away from its maledictive doors."

I have not questioned her, regarding her sorrows and grievances as too sacredly her own for my intrusive inquiries, and she has only revealed that which she chooses to tell. But she is the daughter of my dead friend, and therefore I open my arms, and receive the desolate, heart-broken woman into my home and heart. I flatter myself, too, that her sorrows have been somewhat mitigated through my efforts. She is cheerful, even, sometimes as we stroll in the fields, or wander off among the ragged hills where the wild heatherbell and barberry grow.

One time in particular I remember, as I sit holding the crumpled letter, a scene that with her face comes back to me, as beautiful dreams come sometimes across our days of care.

We had wandered up the hills, and were sitting at the foot of a tree, resting. Our baskets beside us were filled with the red fruit of the barberry, and wreathed with ferns and gayly-colored leaves. In the distance shone the blue waters of the bay, and above us beamed the cloudless sky, while the breeze dallied here and there, hunting of a sterner season.

Miriam leaned her sunny head against the mossy trunk, and sat looking far off over the shimmering waters in the quiet distance, and a look of almost happiness came into the perfect face. I sat watching her, wrapt in admiration, and hoping that the dawning of brighter hours had come.

She turned to me with animation, saying: "This is pleasant; so pleasant and peaceful!" and was glad to answer: "Yes."

That was last year, and since then the fluctuating tides of peace and desquitude have run so often into a sea of counter currents, ebbs, and flowings over that great hope, that I am not certain of anything permanent.

I hesitated a great deal before giving her the missive, thinking that perhaps it might not be conducive of any good, but after all I have done so, and regretted it immediately afterward. I folded up the letter now, wishing something had happened to it before it reached its destination, or that I had had discretion enough to have foreseen the consequences, and had committed it to the grate, as I might have done, seeing it was addressed to me.

While I am indulging thus in self-condemnation she comes down stairs, calm enough outwardly, the glossy hair freshly brushed, and I doubt not the tear-stains bathed carefully off the placid face, so as not to grieve me. She comes forward and takes my hands in her two hot ones, looks pleadingly into my face, and makes a strange request, a request that sends the blood surging back to my heart, leaving my cheeks blanched, an awe, for she pauses, looks troubled and doubtful, and hesitates. But finally she has finished, and I have promised to grant her desire, although in ten minutes after she has kissed me thankfully and settled down on the shadow-flecked steps with a great sigh of relief I regret having done so.

She knows it is my intent to visit a relative living in the suburbs of Hastings, shortly, and she has asked me "while there, take a little run over beyond Fairlight, and visit Heatherleigh." But that isn't the stranger part of her request, though it is all surprising. She looked me calmly in the eyes and asked me to "bring her portrait away from the faded gallery with me."

How on earth am I to accomplish this! At first it seems easy enough to me, but on reflection the undertaking grows stupendous, and borders on the impossible. I sit very still, revolving the request in my mind, and every moment its magnitude is intensified. But I made no sign, and she sits with clasped hands, gazing out at the water, fully confident that I will be able to fulfill my promise, and I haven't the courage to undeceive her.

So we sit out the piece of a day talking some but thinking more until the sun goes down behind the hills, and the shadows grow longer and denser over the carnations and roses, and reach out darty for the gleaming satin of the lilies which they envelop later.

My little maid of all work, rings the tea-bell merrily, then peeps through the blinds to see where we are. Having seen us, her bright eyes disappear, and I know she has flown to her kingdom to keep "the tea proper hot" until we put in an appearance, which we do shortly.

Miriam—I always say simply Miriam—looks satisfied once more. I divine the reason; she has settled the letter question positively in the negative, or rather I have determined it for her by my rash promise.

She now I can see has heard "the Douglas, in his hall" is more than I knew, and obtain the elegant portrait of the daughter of the house, because I am not to reveal her whereabouts—it is her request.

Miriam thinks, however, that I am the one all-powerful equation of her life, and sits over there sipping her tea in full confidence, while I choke down my despair, measure my powers with a broken reed and transform my digits to ciphers.

The day of my departure arrives. Over against its fair, promising skies falls a shadow. I dread to leave Miriam. I would so love take her with me, but the laws of the Medes and Persians are not more irrevocable than Miriam's say. She is to stay here in the cottage at Bayview, and see after my affairs, while I am to go and enjoy myself. As if I could enjoy my visit with that gigantic undertaking supplemented on like a thing of evil.

If Heatherleigh was still in its halcyon days, as when I once visited within its doors, how differently I should feel about this matter; but I understand evil influences lurk in its long, dark halls, and march through its desolate corridors since Sir Rupert's demise.

This is one reason why my little troupe comes to me, in the prospect, like a nightmare, and I feel a terror of it all creeping into my bravest moments.

These reports coming to me by letter occasionally I have never revealed to Miriam, which now is one thing I am thankful for, as I have not frightened her by anything said to me and kept her away thereby.

I am positive, too, that she knows nothing of these things, as she gets no news from merrie old England. Thus, to me, is one ray of relief.

But I am ready, so is my luggage, and I must bid good-bye to Bayview and Miriam.

She clings to me, pale and sorrowful, but there is a wild, eager questioning in her eyes as she lays her tear-wet cheek against mine. Instinctively, I know she is thinking of my promise, and I say, impulsively: "I will bring your portrait, dear." I don't add "I can," which, perhaps, I ought to do, but leave the declarative promise intact, trusting Heaven for the fulfillment. She flings her arms around my neck at this, and with her glad gratitude, releases me, and I am gone.

The friends with whom I intended to call meet me at the pier, and all is well so far. There is an eager tread of passengers, a business air in the movements of the crew, a rattling of chains, a settling here and there, and the good ship Lady Clara weighs anchor and we are on our voyage.

The starting gives me a feeling of courage that I never dreamed of, and I stoutly resolve that, come what may, Heatherleigh's mysteries will not intimidate me. No; I will walk undaunted in its uncanny shadows, and hold converse, if necessary, with its spiritual occupants. And, more than all else, I should doubtless find some who would and could be only too glad to give me the history of the hall and recount to me in detail the sad, tragic story of Miriam.

To be sure, I have already an abbreviated account, a synopsis of the leading events of both, through Miriam and others, but this, my intended visit, should round up the whole.

This is why, I tell myself, I have undertaken this journey, although the sunny face of my cousin Gladys, in her far-away English home, pops up to mental vision, and claims its share in the visit to be.

Ah! yes, dainty little Cousin Gladys, whose fair blue eyes first saw the day in the dreamy light of the poetical Cotswold hills in the very heart of merrie old England, and who fought my "going to America" to live, was expecting me.

She was to-day, doubtless, sitting in her vine-covered porch overlooking suburban Hastings, and gazing seaward, wondering the while when "Attie," who lived in America, would "arrive." With this thought I gather myself together and seek my cabin.

CHAPTER II.

I am in the suburbs of Hastings, where the delicious and invigorating sea breeze wanders over the hills and whispers down the green slopes.

Cousin Gladys' little cottage is a veritable paradise to my quiet-loving soul. Perched away up here on a height and nestling in its wealth of blossoming creepers, it seems a very sweet haven of all I desire. In the distance I can get a glimpse

of the sea, and West Cliff and a bird's-eye view of High Wickham, but it is the picturesque beauty and blessed content of the bright fields and green hedgerows that please me most.

Above the distant downs a few fleecy clouds hover, then drift lazily out over the sea and fade into the infinitesimal. I sit down on the porch, over which the ivy runs in profusion, with a sigh of satisfaction, and presently cousin Gladys joins me for a chat.

We talk of many things, over which falls the glamour of Auld Lang Syne, and by the time she excuses herself to see after the late dinner, I have had a goodly number of pleasant, and not a few unpleasant, reminiscences of suburban Hastings.

My friends of the voyage are staying with relative near Ecclesbourne, and are pleased to notify me by post that they are going farther into the country, and desire my company.

This I can not do, as I am "bound for the hall," in the language, but not the spirit, of Tenyson. While thinking of my friends, however, I laugh a little, but end with a sigh, as bright Miss Stanley comes to view. I presume she has entirely forgotten her tribulation on board the Lady Clara, and her habit of being "victimized to the bowl."

Luckily, I am not a victim of sea-sickness, and while Miss Stanley lay prone in her state-room, I was on deck enjoying the fine weather which we were fortunate enough to have nearly all the way over.

My cousin keeps her open carriage and drives a great deal, and as driving happens to be my penchant also, a goodly share of our visiting is done on wheels. We drove down to the beach several times and whiled away the hours of the long, dreamy afternoons amid the sea breezes and sublimities. The ships, "white-washed and free;" the cliffs, scamed and scarred, and above them the Downs, never grow old or commonplace.

But Heatherleigh! The very name makes me forget the roses here for the rue and the shadows, and my superabundance of courage, coming as it by inspiration on board the Lady Clara, I find has diminished considerably.

Nevertheless, I vow to the trellised vines at my elbow that I am not afraid of any thing in all England, which wild affirmation, I am persuaded, sounds more like bragadoctio than bravery.

There are several fine old places between Hastings proper and the country side flanking Heatherleigh Chase. Some of these stately residences have quite imposing facades, and others, high ivy-wreathed gables, while a number, in their elegance, put you in mind of the days of King Arthur.

But there are bits of sorrowful tradition and legendary lore connected with an occasional grand old structure calculated to make one stand in awe of their environs. Strange fatality marks many an old hall, and Heatherleigh, as I hear, boasts of one of the most tragical.

In the gladsome days when she and I were young, I knew the fair bride of the Percival house. She was a high-born English girl, whose sweet eyes first saw the light in a beautiful villa near Birmingham. I can imagine her fine face radiant with happy existence as the welcome of Heatherleigh's grand old doors floated around her. Ah! yes; I can see her, vivacious, regal and glad; she became Lady Percival our

After she came Lady Percival our paths diverged, of course, but I often wonder to myself why her refined soul went out to me so unreservedly in those days, when I was but a cottager's daughter. "Affinity of soul," Gladys says. Perhaps

she is right, for it is said that sublime relationship recognizes no barrier of circumstance.

Lady Percival was supremely happy during my visit at the hall, at least, but then it was the first year of her married life, and every one is supposed to find the matrimonial alliance pleasant enough for that length of time. But I never had the pleasure of seeing my friend after I parted from her at the end of the long avenue of elms, where she put her jeweled arms about my neck and bade me "come again."

It was this side of that affectionate leaving-taking that all the beauty and sweetness faded from Lady Percival's life and the curses fell. I shudder involuntarily as I call to mind the story of the estrangement, broken hearts, craze, tears and malediction.

There comes a sense of suffocation and dimness of vision as I go back across the intervening years, calling up the memories binding me to the dead.

Lady Percival has been dead several years, and the proud Miriam was orphaned a decade later by the decease of the austere father, and last male descendant of the Percival house. After his tragical end the spiritual manifestations began, which have been a source of mysterious speculation ever since to those acquainted with the detailed disclosures.

To-morrow I shall set out for the Hall, which I only remember for its elegance as a fit setting for the almost divine beauty of my dear dead friend, as I call her to mind. Yes, I shall know for myself if these uncanny tales be true. One bright gleam of hope in regard to my visit of commission is that the old housekeeper, Peggy Clarkson and her husband, are yet occupying the servants' quarters at the Hall. I remember her odd but honest visage, and if she remembers me as kindly as I do her, I shall be well taken care of, at any rate. She was once very fond of "the Lady's guests," and I am in hope concerning Miriam's portrait.

Poor Miriam, in the far-away cottage at Bayview! I fancy she is promending sorrowfully and alone, among the late lilies, and thinking—of me.

I am back again in Cousin Gladys' bright little cottage home. I have been several miles into the country since I sat in the vine-covered porch and listened to the romantic episode. And I have met with such strange experiences, and listened to such a blood-curdling story, that I am half persuaded I have lost my identity. Some way I feel like crying out with the old dame who took a nap in the King's highway: "Lark a mercy, 'tis none of I!"

We do sometimes have adventures that leave us in doubt as to our individuality, and to say that I am just waking up from the nightmare of the Heatherleigh visit would be, perhaps, the correct statement to make.

Yes, I have been there; the fine portrait of Miriam hanging in the little drawing-room yonder, and which Gladys admires very much, is a silent but magnificent sponsor, not to be gossiped away by any means. And now, as my domestic cousin is elbow-deep in the brewing business this fine morning, let me sit here, where the roses have all fallen off and been swept away by the autumn winds, and tell you the story of Heatherleigh, as I will, however, preface the story proper by a description of my visit and the appearance of the Hall as it now stands, knowing, as I do, that my friend's tradition, history and experiences would be unsatisfactorily fitting without it.

It is fitting that the roses have fallen, and that the scurrying breeze tosses the dry alder leaves into my lap. It all murmurs with the tone of the legend, voicing a volume of bitterness. And the old housekeeper told me, I say, why my sorrowing friend on the sea was called Miriam. Because her lot was one of destined woe the christening was Miriam—bitterness. I confess that such things rising before us bring the question of Hamlet out in vivid coloring, as we watch the merciless wheel of fortune crush out the beauty and joy of life for some, when the fault lies generations back.

SWIFT ON THE WING.

The Fastest Railroad Train Slow Compared with a Wild Duck.

"The gadwale—but there; it isn't likely at all that you know what a gadwale is," said an observant wild fowl hunter. "The gadwale is a duck. It is a wild duck that doesn't get East very often, but it is a familiar fowl in the West. I was just about to remark that the gadwale is a bird that can travel nearly a hundred miles while the fastest railroad train is going fifty, and yet it is slow on the wing compared with a canvasback duck, the broadbill, or even the wild goose. I have held my watch on about every kind of wild fowl there is, and know to a dot just how much space any of them can get over in an hour. The canvasback can distance the whole wild fowl family if it lays itself out to do it. When the canvasback is out taking things easy he jogs along through the air at the rate of eighty miles an hour. If he has business somewhere, though, and has to get there, he can put two miles behind him every minute, and do it easy. If you don't believe that, just fire square at the leader in a string of canvasbacks that are out on a business trip some time when you have the chance. Duck shot, propelled by the proper quantity of powder, travels pretty quick itself, but if your charge brings down any member of that string of ducks at all it will be the fifth or sixth one back from the leader, and I'll bet any thing there is on it. If you have the faintest idea in the world of dropping the leader you must aim at space not less than ten feet ahead of him. Then the chances are that he will run plumb against your shot. When he drops you will find him a quarter of a mile or so on, because even after he is dead he can't stop short of that distance.

"The mallard duck is lazy. He seldom cares to cover more than a mile a minute, but he can if he wants to. His ordinary every-day style of getting along over the country takes him from place to place at about a forty-five-mile an hour rate. The black duck can fly neck-and-neck with the mallard, and neither one can give the other odds. If the pin-tail widgeon and wood-duck should start in to race either a mallard or a black duck it would be safe to bet on either one. But if a redhead duck should enter the race you can give big odds on him, for he can spin off his ninety miles an hour as easy as you can walk around the block, and can do it all day. He would be left far behind, though, by the blue-winged or the green-winged teal. These two fowl can fly side by side for one hundred miles and close the race in a dead heat in an hour, and appear to make no hard task of it. The broadbill duck is the only fowl that flies that can push the canvasback on the wing. Let a broadbill and a canvasback each do his best for an hour, and the broadbill will only come out about ten miles behind. One hundred and ten miles an hour can be done by the broadbill, and he consequently makes a mark for a shotgun that a pretty good gunner wouldn't be apt to hit once in a lifetime.

"The wild goose is an astonisher on the fly. It has a big heavy body to carry, and to see it waddling on the ground you wouldn't suppose it could get away from you very fast on the wing. But it manages to glide from one feeding place to another with a suddenness that is aggravating to the best of wing shots. To see a flock of 'honkers' moving along, so high up that they seem to be sweeping the cobwebs off of the sky, you probably wouldn't dare to bet that they were traveling at the rate of ninety miles an hour, but that is just what they are doing, any hour in the day. The wild goose never fools any time away. His gait is always a business one."—N. Y. Sun.

"The Northern plan of husking corn, that of building and putting the stalks from two shocks together, is a good one. One needs a rope, having a light iron ring at one end, with which to draw the tops of the bundles close together, previous to binding tightly so that no rain can enter, and so that the shocks will not blow over. The more care, the more good nutritious fodder will be saved.

"Fricassee of chicken with green corn.—Cut the green corn from the cob, put it in the pot with water enough to cover it, and let it stew until it is nearly done; then cut up the chicken, put it in with the corn and let them stew together about half an hour; put in a few whole grains of pepper, with a teaspoonful of cream or milk; thicken with two tablespoonfuls of flour mixed in a lump of butter; add the salt. Send in to the table smoking hot.

"MILDEW OF POTATOES. Its Symptoms and Causes and How to Prevent It.

The cooler and more moist sections of the country are where the parasitic fungus, generally known as potato rot, attains its greatest vigor and activity, and it is only in the dry regions of the great Western plateaus that the potato grower can hope to wholly escape its ravages. The fungus attacks the stems and leaves as well as the tubers. On the leaves pale yellowish spots first indicate the presence of the disease; these very soon turn brown, and if the weather be warm and damp rapidly blacken, indicating the total destruction of the tissues. The yellowing of the tissues progresses slowly, but as soon as the fungus has pushed out its fruiting threads, which appears as a white, downy coating on the under surface, the discolorations proceed rapidly.

The stems may be attacked directly or the disease may reach them through the leaves; in either case they become blackened and soon die. There is no doubt that the tubers may be and usually are infected by the rain working the spores down into the soil; hence potatoes lightly covered with earth are more likely to be infested than when deeply planted. In this connection Prof. Scribner, in his paper on downy mildew of the potato, submitted to the Department at Washington, suggests that potatoes have a second or protective molding at the first appearance of that disease upon the leaves, made in such a manner that the uppermost tubers shall have at least five inches of earth over them, the tops being bent at the same time so that they hang over the furrows in a half erect position.

Prof. Scribner also calls attention to the fact that at the time of digging the crop the tubers may become infested as they are taken from the ground by spores from the decaying tops. If the digging be delayed for a week or two after the tops have become thoroughly dead, and performed when the weather is sunny and dry, there is little possibility of infection at this period.

Potatoes should be entirely free from surface moisture when stored, and never should be placed where it is damp or where moisture can collect about them. Dusting the tubers with air-slaked lime (one bushel of lime to twenty-five bushels of potatoes) before storing is strongly recommended as doing much towards preventing the rot by the authority quoted. If during the winter the potatoes are found to be rotting they should at once be sorted over and all spotted or unsound ones treated with lime and stored where the temperature is low and the atmosphere dry."—N. Y. World.

PRIMITIVE INTERCOURSE.

Significance of Fire, Smoke and Drum Beating.

R. Andree has lately been collecting information as to the uses of signals for primitive peoples, and the facts he has brought together are summarized in Science. It appears that American Indians use rising smoke to give signals to distant friends. A small fire is started and as soon as it burns fairly well grass and leaves are heaped on the top of it. Thus a large column of steam and smoke rises. By covering the fire with a blanket the Indians interrupt the rising of the smoke at regular intervals and the successive clouds are used for conveying messages.

Recently attention has been called to the elaborate system of drum signals used by the Cameroon negroes, by means of which long messages are sent from village to village. Explorations in the Congo basin have shown that this system prevails throughout Central Africa. The Bakuba use large wooden drums, on which different tones are produced by two drumsticks. Sometimes the natives "converse" in this way for hours, and from the energy displayed by the drummers and the rapidity of the successive blows it seemed that the conversation was very animated.

The Galla, south of Abyssinia, have drums stationed at certain points of the roads leading to the neighboring states. Special watchmen are appointed, who have to beat the drum on the approach of enemies. Cochi, who observed this custom, designated it as a "system of telegraphs."

The same use of drums is found in New Guinea. From the rhythm and rapidity of the blows the natives know at once whether an attack, a death or a festival is announced. The same columns of smoke or (at night) fires to convey messages to distant friends. The latter are also used in Australia. Columns of smoke of different forms are used for signals by the inhabitants of Cape York and the neighboring island.

In Victoria hollow trees are filled with fresh leaves, which are lighted. The signals thus made are understood by friends. In Eastern Australia the movements of a traveler were made known by columns of smoke, and so was the discovery of a whale in Portland bay.

Threads from Beak Crystal.

Fibers of unequal fineness, useful for scientific purposes, can now be made by melting rock crystal in an oxy-hydrogen jet and drawing it into threads, then drawing these threads into the finest fibers by attaching them to the tail of an arrow, which is shot from a crossbow. Threads of less than 1-10,000 of an inch are produced, and they are stronger than steel. Their ends can not be traced with a microscope, and are certainly less than a millionth of an inch in diameter.

In this country 1,045 men produce 4,500 tons of Bessemer steel in a week, or 43 tons per man. In England 600 workmen produce 1,300 tons in a week, or only 2.5 tons per man. The average wages in this country are thirty-five per cent. higher than in Great Britain, according to good English authorities.

FARM AND FRESIDE.

—Farm horses kept in well-ventilated stables when not at work will fare better, usually, than at pasture fighting flies.

—Beet Salad: Slice, and put into dice, sufficient cold, boiled beets to make one pint; heap them in the center of a salad dish and cover with a half pint of sauce Tartare. Garnish with parsley, and serve very cold.—Table Talk.

—Milk may be canned just as you would fruit. Bring the milk to the boiling point and fill your jars to the brim with it, then shut air tight. This will keep any length of time and be just as good when opened as when it was put up.

—For green gage jam skin and stem ripe green gages. Make a sirup, using three-fourths of a pound of sugar to a pound of fruit and just enough water to keep the fruit from burning at first. Put the fruit in and boil quickly three-quarters of an hour, skimming and stirring often.

—Baked cucumbers.—Cut fine, large cucumbers lengthwise, scoop out the seeds, and stuff them with a dressing made of cold veal or chicken, bread crumbs, salt and pepper to taste, and enough melted butter to make a smooth paste. Tie the two halves of the cucumber together and bake in a slow oven. Serve hot as a side dish.—The Housekeeper.

—To can grapes.—Pick them carefully from the stems, taking care not to tear the skins much; put them in a porcelain kettle, with a little water; stir them carefully and only enough to make sure that they are well heated through; then put them in the cans. The pulp will then be whole, and the sauce not all seeds and skins.

—Little red ants, it is said, can not travel over wool or rag carpet. One who has tried it covered her floor with coarse hair, set her sofa on that, and has not been troubled since. She adds: "Cover a shelf in your closet or pantry with fannel, set whatever you wish to keep from the ants on it, and they will at once disappear."

—The Northern plan of husking corn, that of building and putting the stalks from two shocks together, is a good one. One needs a rope, having a light iron ring at one end, with which to draw the tops of the bundles close together, previous to binding tightly so that no rain can enter, and so that the shocks will not blow over. The more care, the more good nutritious fodder will be saved.

"Fricassee of chicken with green corn.—Cut the green corn from the cob, put it in the pot with water enough to cover it, and let it stew until it is nearly done; then cut up the chicken, put it in with the corn and let them stew together about half an hour; put in a few whole grains of pepper, with a teaspoonful of cream or milk; thicken with two tablespoonfuls of flour mixed in a lump of butter; add the salt. Send in to the table smoking hot.

"MILDEW OF POTATOES. Its Symptoms and Causes and How to Prevent It.

The cooler and more moist sections of the country are where the parasitic fungus, generally known as potato rot, attains its greatest vigor and activity, and it is only in the dry regions of the great Western plateaus that the potato grower can hope to wholly escape its ravages. The fungus attacks the stems and leaves as well as the tubers. On the leaves pale yellowish spots first indicate the presence of the disease; these very soon turn brown, and if the weather be warm and damp rapidly blacken, indicating the total destruction of the tissues. The yellowing of the tissues progresses slowly, but as soon as the fungus has pushed out its fruiting threads, which appears as a white, downy coating on the under surface, the discolorations proceed rapidly.

The stems may be attacked directly or the disease may reach them through the leaves; in either case they become blackened and soon die. There is no doubt that the tubers may be and usually are infected by the rain working the spores down into the soil; hence potatoes lightly covered with earth are more likely to be infested than when deeply planted. In this connection Prof. Scribner, in his paper on downy mildew of the potato, submitted to the Department at Washington, suggests that potatoes have a second or protective molding at the first appearance of that disease upon the leaves, made in such a manner that the uppermost tubers shall have at least five inches of earth over them, the tops being bent at the same time so that they hang over the furrows in a half erect position.

Prof. Scribner also calls attention to the fact that at the time of digging the crop the tubers may become infested as they are taken from the ground by spores from the decaying tops. If the digging be delayed for a week or two after the tops have become thoroughly dead, and performed when the weather is sunny and dry, there is little possibility of infection at this period.