THE HOME CIRCLE.

The Coal Imp.

I was sitting one night by my fire—
Twas a fire of Westmoreland coal
With a mixture of coke which I reco
As a comfort for body and soul.

My chamber was cosy and warm;
The curtains were closed all around;
and the snow at the windows rattled away
With a soft and tinking sound.

As I sat in my easy chair,
I think it had got to be late;
And over the top of my book, I saw
A face in the glowing grate.

An ugly old face, too, it was— With wings and a tail—I declare; And the rest was ashes and smoke and fame And ended I don't know where.

Bo queer were the features, I said "I must put you on paper, my friend;" And took my pen and jotted him down— Face, wings, and wriggling end.

A queer old codger he scemed, As vaguely he stared and shone; But I fixed him in outline as well as I could and added a touch of my own.

He flapped his wings in the grate, And struggled and puffed to be free, And sowled with his biszing carbuncle eyes As if he appealed to me.

Then I said—but perhaps I dreamed—
"Old fellow—how came you there?"
"I am not an old fellow"—the face replied,
"But a prisoned imp of the air.

"In the shape of combustion and gas
My wings I begin to find out;
So I fiap at the bars and grow red in the face,
And am ugly enough, no doubt. "I am made for a much better lot; But I cannot escape as you see; Blistered and burnt and crammed in a grate,— What could you expect of me.

"I once was a spirit of air, A delicate fairy page Long, long ago—in fact, before The carboniferous age.

"For centuries I was kept Imprisoned in coal-beds fast, When you kindled your fire this evening, you I thought I was free at last.

"But it seems I am still to wait; No wonder I'm cross as a bear, Make faces and flutter my wings of flame, And struggle to reach the air."

"My ruby-faced friend," I said,
"If you really wish to be free,
Perhaps I can give you a lift or two,
It's easy enough. We'll see."

Then, taking the poker, I punched A hole in the half burnt mass— When the fire lesped up, and the imp flew off In a laugh of flaming gas. -C. P. Cranch, in St. Nichol

Education of Young Women in Agricultural Colleges.

[From Pacific Rural Press.]

We recommend the following clear and lucid presentation of the new education for women in colleges and universities provided for by the State and National governments to the editors of the Berkeleyan. It is written by the President of the Kansas State sgricultural college, Rev. J. A. Anderson, for some years a clergyman in California and not a granger. The objective point aimed at by him is the graduation of competent industrialists, male and female. not of male or female scientists and literati. He disclaims all intention "of flying a literary kite with an agricultural tail," which he "believes has not a cent of money in it for the

of the endowment should be offered to both sexes alike, it merely declared that the design of Congress in creating the institution should be executed for both, because the relation which the Legislature holds to the grant is simply that of a trustee who, voluntarily accepting the trust, becomes legally bound to employ it for the purposes and under the conditions specified by Congress as the granter. It has, therefore, no legal power, either by its own act or that of any agent which it may appoint, to make such a use of the fund arising from the endowment as will either defeat, pervert, or fail to accomplish the expressed will of the grantor. The furnishing of what is usually termed a "literary "highly finished" education, designed to epare "the accomplished woman" for her life of elegant leisure, would evidently be such a perversion just to the extent that her life differs from that of the woman who works as an industrialist. However desirable it may be that dustrialist. However desirable it may be that Hortense should have a training especially qualifying her to amuse Charles Augustus with comedy, song and the poetry of intellectual motion, Congress did not create agricultural colleges for that purpose. It had previously endowed the many State universities for her benefit, which provide a course generous in endowed the many State universities for her benefit, which provide a course generous in Latin, Greek and polite literature, liberal in the purest of pure sciences, and garnished with the rarest blossoms of the hot house arts. In granting a new and wholly different endowment, "in order" to make the industrial workers "fit for delive industrial business." granting a new and wholly different endowment, "in order" to make the industrial workers "fit for doing industrial business," it by no manner of means intended to duplicate the universities, for had such been the intention the word "professional" would have been substituted for "industrial," and Concress itself would have consolidated this endowment with that of the universities. The fact is it had turned from Hortense, already so generously provided for, and was making a grant for the especial benefit of Mary, Martha, Susan and Jane, and it enjoined the trustees to aim directly, fully and fairly, and to endeavor wisely, honestly and vigorously to put these girls in actual possession of such knowledge and skill as would enable them to earn the most money in the easiest way by intelligent labor.

We admire Hortense, and from a distance most respectfully contemplate Charles Augustus. It is delightful, on commencement days, to mingle with the numerous and influential friends of their respec ive fathers and listen to orations, great in power and glory, which describe the educational dainties feasted upon by the young couple, praise their remarkable appetites therefor, and predict the future greatness they must freevitably attain because daily "fed on Cesser's m. at." Hortense is so charming and happy, Charles Augustus so strong and self-restrained, the influential friends so beam-

ing and the fathers so radiant that all of us concur in the absolute necessity of instantly providing yet more generously for their education. And ss we roll away in easy carriages the air seems more balmy with perfect content, the moonbeams brighter with promise and the mellow earth more luxuriant in hope than ever before. But there are other scenes in cities. Why do Marys, with callous d fingers, pale faces and wearied frames hurry past us from the workshop to the attic? Why do we hear of widows toiling from dawn to midnight and from the day of their widowhood till dea h cuts the thread of toil and the grave folds away the garments of labor? Why are there any orphans forced by the gnawings of hunger to meekly endure the scorn of companions, the buffeting order by the gnawings of uniger to meetly endure the scorn of companions, the buffeting of adults and the avarice of Shylocks,—little ones whom even God seems to have forgotten, whose pinched souls grow faint in the struggle for just enough bread to keep the cords of life for just enough bread to keep the cords of life from snapping? Why do crops fail, why do employers discharge workmen, and why does the resulting poverty so fetter the hands of in dustrious fathers that, though from the very core of great hearts intensely loving their daughters and sons, they are powerless to give them a professional education?

Nevertheless, neither the good God nor the American nation has really forgotten those classes who work with their hands; and while endowing the universities to educate Hortense.

classes who work with their hands; and while endowing the universities to educate Hortense, with others, the American Congress doubled the endowment for the industrial education of Mary, Martha and Jane. The two educations are, and must be, as different as is the labor of cooking a dinner different from the pleasure of cating it, or as is the tell of a martine in cooking a dinner different from the pleasure of cating it, or as is the toil of a seamstress in making a shirt different from the comfort of him who wears it. From this standpoint the attempt upon the part of the agricultural colleges to educate Mary as the universities educate Hortense is a perversion of the design of the grantor which neither legislatures nor their search have the legal or worst power to permit. agents have the legal or moral power to permit. And in those States where the two institutions are separated, as much as all may desire to add the ripest of literary strawberries, the richest of intellectual cream and the sweetest sugar of all the graces to the educational repast spread for the fortunate Hortense, from our standpoint the preceding to pay for these by taking the for the fortunate Hortense, from our standpoint the proposition to pay for these by taking the endowment of agricultural colleges, though grateful to tax-paying pockets, looks so remarkably like square, stronghanded robbery that the working classes, the friends of Mary and Tom, might not be able to see that it is not; might not perceive the distinction metaphysically apparent to the acute minds of the influential friends of Hortense and Charles Augustus; might regard such a proposition as a political "gobble" and be disposed to furnish election tables with the gobblers roasted to a turn. There may be exactly such a danger, as is shown by the mutterings of the industrial journals all over the land; and, somehow, the proposition over the land; and, somehow, the proposition looks as if it were not exactly manly, honorable or just, and as if its execution would defeat the design of the grantor, who, in giving the money, certainly had a right to designate the object of

certainly had a right to designate the object of its expenditure.

In determining the studies taught, the mode of teaching, and the facilities afforded by the female department of an agricultural college, the controlling purpose must be that of making the girl an intelligent and competent industrialist. Any other attempt or any unreasonable failure to accomplish this purpose is a virtual breach of trust, quite as marked and great as would be that of sinking the education of farmers under the fathomless waves of a university course directly designed for the training of lawyers or preachers. And if it be objected that such a view limits these institutions to the single function of teaching the girl tions to the single function of teaching the girl a trade only we reply that the female industrial-ist, being a woman both before and during her industrial work, has an inalienable right to a woman's education as contemplated by the first group; that being, to say the least, lieves has not a cent of money in it for the industrial student, whose estate pays for the kite."

To furnish an education that will prepare the girl to follow some industrial vocation is clearly the main purpose and chief function of this institution so far as females are concerned. It was endowed by Congress "to promote the liberal and practical education of the industrial classes in the several pursuits and professions in life;" and the whole act, as well as the debates, shows that not "the learned" but "the industrial" professions were intended, and that the design was not to educate the industrial classes into general knowledge, but into such knowledge as is most valuable to them in the practice of their industrial callings.

When the Legislature, in view of the fact that both females and males engage in the industries of the State, decreed that the benefits of the wife and mother, who, just because she is also an industrialist, not only requires the mental culture of wives who are not, but, in addition, all the knowledge that is really useful is ensuring the greatest profit to her labor; the there do the state and males engage in the industries of the State, decreed that the benefits of the wife and mother, who, just because she is also an industrialist, not only requires the material culture of wives who are not, but, in addition, all the knowledge that is really useful is ensuring the greatest profit to her labor; the there do the state and males engage in the industrial callings.

When the Legislature, in view of the fact that both females and males engage in the industrial callings.

When the Russands AND Shiers.—The Troy, N. Y.

HUSBANDS AND SHIRTS .- The Troy, N Y , Times, has this amusing gossip: A day or two ago we overheard two ladies talking about a new dress, and one of them remarked that "When I tried it on I asked Rob if it was a good fit about the waist, and he replied, 'Well, I should say not. It fits about as well as a bome-made shirt." There was a volume in Rob's reply. As a rule, home-made shirts don't fit at all. They will draw in at the back and over the shoulder to that extent that a fellow don't know whether he is encased in a shoulder-brace or a straight-jacket. The neckshoulder-brace or a straight-jacket. The neck-band may not go twice around and tuck in behind, but it usually laps about three inches, or else it is cut so low in the neck that a twenty-four inch collar is required to reach the collar-button. In leaning forward when sitting the bosom crushes in at the side and projects in the middle, looking more like a badly demoralized dust-pan than anything else. The sleaves are so short that the large twenty five sleeves are so short that the large twenty-five cent pair of cuff buttons, selected with great care, either tickle a fellow's elbows or dangle around his fluger nails, never arriving at a compromise between the extremes. The skirts are generally of an abbreviated character, making the affair resemble an overgrown roundabout. Men do not like to find fault, knowing that their wives meant well enough, and worked hard in making the garments, but, when away from the house, they do not hesi-tate to say that the desire of their hearts is that their wives should go out of the business.

that their wives should go out of the business.

An Inhuman Practice.—The practice of bleeding calves to make the meat look white has, the Boston Globe informs us, been very properly condemned by the Society for the Prevention of Cruelty to Animals, both on account of the pain thereby inflicted on the poor creatures, and the injury done to the public health by the use of this dry and innutritious article of food. A distressing case of this kind of cruelty has just been shown up in Liverpool, where quite a number of calves were found with pins in their necks, undergoing the painful and exhausting process of bleeding. Some of these poor creatures were lying down in a pool of blood, while others were being beaten and probed over the body with a pointed stick. A vigorous prosecution of these torturers is being made, and it is to be hoped that an end of the barbarous practice will be forced.

Love of Countar.—A Western stump ora-

Love or Countray.—A Western stump ora-tor, in the course of one of his speeches, re-marked: "Gentlemen, if the Par-sy-fix ocean wor an inkstand, and the hull clouded canopy of heaven and the level ground of our yearth wor a sheet of paper, I couldn't begin to write my love of country onto it."

The Human Beard.

Physiologists generally agree in the fact that every portion of the body bears some sympa-thetic relation to the brain, or its function, the thetic relation to the brain, or its function, the mind. This would argue that if man wishes to preserve all his native purity, both of mind and body, and be god-like in all his designs and aspirations, with a full capacity to appreciate and comprehend the universe of appreciable things, he must be perfect, entire and wanting nothing. Wearing the beard was as common to the ancients as wearing the hair; and if any man were disfigured by being shorn, as a punishment, it was considered a disgrace, and his effeminate appearance humiliated him, and kept him from society until his beard had grown again.

and kept him from society until his beard had grown again.

Beards are also indications of character. Men of great precision and nicety of taste, who are somewhat aristocratic in their manner, brush their beard forward; others, more democratic, brush theirs downward. Some train the mustache one way, and some another, according to their some precision tested. cording to their own peculiar tastes. A person who has never shaved has a soft, beautiful, flowing beard and mustache, which can be dressed to suit the taste or fastidiousness of the wearer.

Origin of Shaving.

It is said that the habit of shaving was in-troduced by a young English king, who was too young and effeminate to raise a heard; and that the practice soon became so universal that if a preacher or school teacher wore a beard, he was made a subject of ridicule.

Philosophy and Structure of the Beard.

The beard on the face of man was designed to serve important ends in his animal economy. A moment's attention to its structure and most obvious uses will make this plain.

The beard, like the hair of the head, is hollow, and the bulbous root of every hair of the beard is joined to a nerve of the face. Into the orifice of each hair constituting the beard, the connected nerve discharges a portion of its own vital fluid, which retains its fluid state fully to the surface of the skin, and by its support keeps the beard soft and healthy. When fully to the surface of the skin, and by its sup-port keeps the beard soft and healthy. When the face is closely shaven, thousands of open-ings are made, through which flow out as many streams of nervous fluid. It is estimated that the man who shaves three times a week, wastes thirty times the amount of vital fluid required to sustain an unshaven beard. This outflow continues after each process of shaving till the fluid spreading forms a coating, which causes the flow to cease. The waste thus made is a draft upon the entire nervous system, as much so as the cozing of blood would be a drain upon the vitality of the body.

Not only are the fountains of life thus inva-

Not only are the fountains of life thus invaded by the razor, but also the natural covering of the face is removed, subjecting the delicate termini of the facial nerves exposed to sudden transitions of temperature, often much to the detriment of health. Let a person thus shaven go out in a cold day; he experiences a painful sensitiveness to the cold, of the part so uncovered, while myriads of doors are open, inviting disease to enter, and the nerves are so many telegraph wires to bear the tidings through every part of the animal frame. Is it then marvelous that living as most men do, daily or tri-weekly renewing the barbarous practice of shaving, even though there were no other injurious effects, find the stream of life running nearly or quite to exhaustion?

Influence on the Lungs and Eyes.

That the beard of the upper lip is of service to the eyes and lungs, we have most conclusive proof. Whoever has put a dull razor to the beard on that part of the face, starts tears from the eyes, thus demonstrating the immediate nervous connection between that part of the beard and the eyes. Also, shaving the lower lip and chin, has a tendency to develop and aggravate diseases of the lungs and other conaggravate diseases of the lungs and other constitutional disturbances. A preacher of the gospel who had for years kept a clean shaven face, was troubled by loss of sight and a general prostration of health. He ceased shaving and in a few month his eyesight was restored, and he regained his usual health. We might refer to numerous instances where the eyesight and general health has been very much improved by ceasing to follow the barbarous custom of shaving.

General Uses of the Beard.

A farmer who raised clover seed once said to us that he had found that no man who shaved could work consecutively more than two days at cleaning clover seed, while those with full beards could continue such work week after week. Persons working at needle-grinding, some-cutting, or any dusty work, are protected by the mustache and heard from the tected by the mustache and beard from the large amount of irritating dust that was formerly inhaled by such laborers when they shaved; and according to recent statistics, the mortality formerly so large among that class of artisans, has sensibly diminished since the wearing of the beard has become more general. Consumption and disease of the air passages were not so common previous to the era of shaving; and let us hope that by ignoring the razor, man may yet recover his accustomed constitution, and that some future generations may attain, if not the age of our fathers, ected by the mustache and be ard from the may attain, if not the age of our fathers, at least a perfect development, both in body and mind. In such manner can we approach a similarity to God's likeness, and expect a repetition of the saying: "And God saw everything that he had made, and behold it was very good."

Conscience -What is it?

I will first say what it is not. It is not what Webster defines it to be. It is in no sense a knowing faculty, a perceptive faculty or seeing

What is it? Simply a passional emotion What is it? Simply a passional emotion, aroused upon the perception by the intellect of what is right and just, under the given circumstances. Its gratification is in the performance of right, its violation and pain is in the performance of wrong; its language is, "do right, be right;" but it no more perceives or knows what is right or wrong in any case than the

what is right or wrong in any case than the passion of anger or resentment does.

A man may have conscience weakly developed and at the same time have a good intellect and a very clear perception of justice and right, and yet be prompted in his actions by acquisitiveness or some lower passion or propensity which is so much stronger than conscience as to hold the latter in abeyance. A weak conscience is a moral unsoundness. weak conscience is a moral unsound:

weak conscience is a moral unsoundness.

Some say conscience may be educated; it can no more be educated than anger can; they may be cultivated but cannot be educated, for neither are knowing faculties.

The intellect may be educated in science, or in error, and conscience will always prompt in accordance with the decisions of the intellect. If a man's intellect has been so educated as to cause him to decide that it is right to burn herotics at the stake, his conscience will be gratified in the act. If he has been so educated as to know that belief is involuntary, and consequently all forms of belief should be tolerated, conscience will be gratified in the individual acting accordingly.—Exchange.

Young Forks' Column.

Purity in Boys as Well as Girls.

The way some parents have of talking and thinking that boys do not need to be treated as as if they were honest, truthful, pure minded, if in all our intercourse we appeal to their highest feelings, if we expect nothing which is not respectful and noble of them, we shall keep a high standard before them. We should, in look and word, carry ourselves so they will feel sure we have no thought or suspicion of any-thing low or mean. We do this in our treat-ment of girls; and is that not one reason why they are purer and nobler, because they are shielded from wrong, so hedged in from things that are vile.

shielded from wrong, so hedged in from things that are vile.

Boys are spoken of, and to, as if they were expected to be rude and unmannerly. I notice even Sunday-school superintendents speak harably and severely to the boys, when the girls are whispering and making quite as much noise and no notice is taken of it. Would it be so, think you, if the mothers were superintendents, instead of the fathers? I think not. Mothers have as keen a sense of justice toward their boys as toward their girls. The sense of justice in small boys is hurt by such treatment; but soon they learn to shield themselves behind the feeling, there is no use trying to behave well, nobody expects it of boys. Thus little by little the standard of excellence and delicacy, which they have until they have got beyond childhood, is marred and destroyed. Even mothers comfort themselves by saying: "Boys must come in contact with the world," meaning with other boys and men, who have had their best impulses blunted and seared by just this same process, until to be manly does not imply all that is grand, noble and true in a human being.

The standard of manliness in heroes and poets is not the one we find as we mix and mingle in this how world—avertions there are

poets is not the one we find as we mix and mingle in this busy world—exceptions there are enough to prove the class not extinct.

How many thousand hearts have acked, and

How many thousand hearts have ached, and are aching, because their idols are all broken. This ought not so to be. Men should be as pure, as clean, as noble and as high-toned as women. There is no way to make them so except to begin with the boys. As long as our boys must go to an unclean closet in the yards of our academies, and are shut out of all the of our academies, and are shut out of all the best places, and treated as if they were culprits, so long will they be just what they are; which is largely the result of their training. Until a different course is pursued we shall have bad boys and bad men. If society was anxious to have them bad, it could not devise a surer way of doing it. Make the standard for the boys as high as for the girls. If this could be done for fifty years the millenium would be dawning. dawning.

A Talk With Boys.

A cotemporary writes that he has recently been studying the characteristics of men, and has come to the conclusion that, in many cases, their mothers did not do their full duty in bringing them up," which, he further remarks, "carries me back to the boys." There are so many awkward, lubberly, vulgar, grown-up boors, and so few real gentlemen, that it is very fair reasoning to infer that they were not properly cared for when they were young; for a straight twig usually makes a straight tree. He says: A lad dined with me one day; he was twelve or fourteen years old. He had a pug nose, red hair and a freckled face. His coat was patched at the elbows, and his pockethaudkerchief was a cotton one and coarse at that. After he went away, the lady of the house said, "I like to entertain such company as that lad; he has such beautiful manners."

At another time, a woman left her son with

lad; he has such beautiful manners."
At another time, a woman left her son with me for a dsy, and I took him with me to dine. His face was very handsome. He had splendid eyes, a fair skin, and was finely dressed. His mother was a rich woman, and her son had every advantage that wealth bestows. When the day was over, a friend remarked, "How very much relieved you must feel!" "Why?" I asked. "Didn't that boy annoy you exceedingly? He has such disagreeable manners. He is only fit to be shut up in a pen with wild animals."

mals."

"But that boy's mother was to blame," you exclaim. Certainly, and so are many of yours, and for this very reason boys must take the making of their "palaces and fortunes" in their own hands.

One gets tired tables.

their own hands.
One gets tired talking to mothers about their One gets tired talking to mothers about their duties, especially when they are more concerned about the spring jackets of their boys than their manners. Then possibly many of them say, as I heard one the other day, "Oh, Johnnie will come out all right! It will be time enough for flue manners ten years hence."

An ill fruiting tree may be grafted to hear

An ill fruiting tree may be grafted to bear good fruit, but one can aiways detect the joining of the stocks. Very much so it is with manners acquired late in life—they have a stuck on appearance. But if acquired in youth, taken in when the body, mind and heart are specially alive and open to influences, they become "bred in the bone," and the man never loses their controlling power. They become a part and portion of him, and of such a one we say, ' he is a real gentleman."

Boys must learn to read and reflect more for

themselves. They should take more pride in becoming the architects of their own fortunes. The most successful men of the present day are those who have made themselves such by their own individual efforts.

Disagreeable Habits.

Nearly all the disagreeable habits which Nearly all the disagreeable habits which people take up come at first from mere accident or want of thought. They might be easily dropped, but they are persisted in until they become second nature. Stop and think before you allow yourself to form them. They are disagreeable habits of body, like scowling, winking, twisting the mouth, biting the nails, continually picking at something, twirling a key or fambling at a chain, drumming with the fingers, screwing and twisting a chair, or what. fingers, screwing and twisting a chair or what-ever you can lay your hands on. Don't do any of these things. Learn to sit quietly, like a gentleman, we were going to say, but I am afraid even girls fall into such tricks some-

There are much worse habits than these, to be sure, but we are only speaking of very little things that are only annoying when they are persisted in. There are habits of speech, also, just as beginning every sentence with "you see," or "you know,"" I don't care," "now-a," "why-a," "tell ye now." Indistinct utterance, sharp nasal tones, a slow drawl, avoid them all. Stop and think what you wish to say, then let every word drop from your lips just as smooth and perfect as a new silver coin. Have a care about your ways of sitting and standing and walking. Before you know it, you will find your habits have hardened into a coat of mail that you cannot get rid of without a terrible effort. There are much worse habits than these,

Interesting Incident in the History of Nail Manufacture.

The difficulties which the early workers in iron were so often called to encounter is forcibly illustrated in the following incident connected with the history of the old splitting mills gently and considerately as girls, is productive so common in early days of rolling mills, of wide spread mischief. If we treat children given in Scrivenor's "History of the Iron Trade:"—"The most extraordinary and the best attested instance of enthusiasm existing in conjunction with perseverance is related of the founder of the Foley family. This man, who was a fiddler, living near Stourbridge, England, was often witness of the immense labor and loss of

a fiddler, living near Stourbridge, England, was often witness of the immense labor and loss of time caused by dividing the rods of iron necessary in the process of making nails.

"The discovery of the process called splitting, in works called splitting mills, was first made in Sweden, and the consequences of this advance in art were most disastrous to the manufacturers of iron about Stourbridge. Foley, the fiddler, was shortly missed from his acoustomed rounds, and was not again seen for many years. He had mentally resolved to ascertain by what means the process of splitting of bars of iron was accomplished; and, without communicating his intention to a single human being, he proceeded to Hull, and thence, without funds, worked his passage to the Swedish iron port. Arrived in Sweden, he begged and fiddled his way to the iron foundries, where, after a long time, he became a universal favorite with the workmen; and, from the apparant entire absence of intelligence, or anything like ultimate object, he was received into the works, to every part of which he had access. He took the advantage thus offered, and having stored his memory with observations of all the combinations, he disappeared from amongst his kind friends as he had appeared—no one knew whence or whither.

"On his return to England he communicated

knew whence or whither.
"On his return to England he communicated "On his return to Eugland he communicated his voyage and its result to Mr. Knight and another person in the neighborhood, with whom he was associated and by whom the necessary buildings were erected and machinery provided. When at length everything was prepared, it was found that the machinery would not act; at all events it did not accomplish the sole end of its events it did not accomplish the sole end of its erection—it would not split the bar of iron. Foley disappeared again, and it was concluded that shame and mortification at his failure had driven him away forever. Not so; again, somewhat more speedily, he found his way to the Swedish iron works, where he was received joyfully, and, to make sure of their fiddler, he was lodged in the splitting mill itself. Here was the very end and aim of his life attained beyond his utmost hope. He examined the works, and very soon discovered the cause of his failure. He now made drawings or rude tracings; and having abided an ample time to verify his observations, and to impress them clearly and vividly on his mind, he made his way to the port, and once more returned to England port, and once more returned to England This time he was completely successful, and by the results of his experience enriched him-self and greatly benefited his countrymen. This I hold to be the most extraordinary in-stance of credible devotion in modern times."

Useful Hints.

If you get a fish bone in your throat, and sticking fast there, swallow an egg raw; it will be almost sure to carry down a bone easily and certainly. When, as sometimes by accident, corrosive sublimate is swallowed, the white of one or two eggs will neutralize the poison, and change the effect to that of a dose of calomel.

For chilblains, cut up two white turnips, For chilblains, cut up two white turnips, without paring, into thin slices; put the slices into a tincup with three large spoonfuls of lard; let it simmer slowly for two hours, then mash through a sieve; when cold spread it on a soft linen cloth and apply to the chilblain at night. Milk for breakfast, when used in the form of bread and milk, should never be boiled, but steamed; that is, the jug of milk should be stood in a saucepan of boiling water for two or three minutes until hot,

To prevent hard soap, prepared with soda, from crumbling, the bars may be dipped in a mixture of resin soap, beef tallow and wax.

A little camphene dropped between the neck

A little camphene dropped between the neck and stopper of a glass bottle will render the latter easily removed if jammed fast.

To make silk which has been wrinkled appear

like new, sponge on the surface with a weak solution of gum arabic or white glue, and iron

Leather can be made hard by saturation in a solution of shellac in alcohol.

Paraffine is the best material for protecting

polished steel or iron from rust.

Soap and water is the best material for cleaning jewelry.

Development of Magnetism in the Rails of Railways.

M. Heyl, engineer of one of the German railways, in a recent report upon the special section under his charge, calls attention to the development of magnetism in the rails. He says: I have observed that all the rails are transformed at their extremities, after they have been placed in position a few days, into powerful magnets, capable of attracting and of retaining a key or even a heavier piece of metallic iron. These rails preserve their magnetism even after they have been removed, but they lose it gradually. When in position, however, the magnetism is latent, only becoming free when the chairs are removed, and disappearing again when they are replaced. Hence it is necessary to assume that two opposite poles come together at each junction, and that each rail is a magnet, the poles being alternately reversed throughout the line. This production of magnetism in the rails examined is undoubtedly attributable to the running of the trains and to the shocks, frictions, etc., thereby produced. The hypothesis of electric currents, induced or direct, must be rejected, since it is negatived by experiments upon the subject made with suitable apparatus. Although the interest attaching to the fact above stated is at present purely ecientific, it is not impossible that the magnetism thus developed may exercise an influence actually beneficial upon the stability of the roadway, increasing the adherence to the rails and the friction. It is possible also that the magnetic currents may be stronger at the moment of the passage of the trains, than either before or after. If this be so, the observations may acquire a still higher practical importance. railways, in a recent report upon the special section under his charge, calls attention to the so, the observations may acquire a still higher

Nitra-Gliverance.—Professor Mowbray, in a recent lecture before the Stevens Institute of Technology, on the subject of explosives, stated that nitro-glycerine is now largely made from the fatty waste of steerine and soap factories. Its density, which is 1.6, water being 1, enables it to exercise its tremendous force; for, in a given bulk, there is 60 per cent, more gaseous matter than would be contained in it were it only of the density of water.