

LITERATURE.

HELEN EYRE.

In a beautiful town in the south of Scotland, distinguished by the noble river that sweeps by its gardens, its majestic bridge, its old crumbling tower, and a grandee's princely domains, that stretch with their single gigantic trees and many spacious groves all round the clustered habitations, resided, for one half-year, an English Officer of Cavalry and a young and lovely woman, who was—not his wife. He was then the youngest son of a noble family, and, with some of the vices, possessed many of the virtues of his profession. That he was a man of weak principles, he showed by having attached to him, by the tenderest ties, one who, till she had known him, had been innocent, happy, and respected; that he was not a man of bad principles, he showed by an attention to her as gentle, refined, and constant as ever husband paid to wife. He loved her truly and well. She was his mistress—degraded—despised—looked on with curious and scornful eyes—unspeakable to but by his voice, solitary indeed when he was absent, and revived by his presence into a troubled and miserable delight, that, even more than her lonely agonies, told her that she was for ever and irretrievably lost. She was his mistress—that was known to the grave who condemned, to the gay who connived, and to the tender-hearted who pitied them both—her and her seducer; but though she knew that such was her odious name, yet when no eyes were upon her but those of Marmaduke Stanley, she forgot or cared not for all that humiliation, and conscious of her own affection, fidelity, and, but for him, innocence too, she sometimes even admitted into her heart a throb of joy and of pride in the endearments and attachment of him whom all admired and so many had loved. To be respectable again was impossible—but to be true to the death unto her seducer, if not her duty, was now her despair—and while she prayed to God for forgiveness, she also prayed that when she died, her head might be lying on his guilty but affectionate bosom. To fly from him, even if it were to become a beggar on the high-way; or a gleaner in the field, often did her conscience tell her; but though conscience spoke so, how could it act, when enveloped and fettered in a thousand intertwined folds of affections and passions, one and all of whom as strong as the very spirit of life?

Helen Eyre prayed that she might die: and her prayer was granted. He who should have been her husband, had been ordered suddenly away to America—and Helen was left behind, (not altogether friendless,) as her health was delicate, and she was about to become a mother. They parted with many tears—as husband and wife would have parted—but dearly as she loved her Marmaduke, she hoped that he might never see her more, and in a few years forget that such a creature had ever been. She blessed him before he went away, even upon her knees, in a fit of love, grief, fear, remorse and contrition; and as she beheld him wave his white plumes towards her from a distance, and then disappear among the trees, she said, "Now, I am left alone for repentance, with my God!"

This unfortunate young creature gave birth to a child; and after enjoying the deep delight of its murmuring lips for a few days, during which the desire of life revived within her, she expired with it asleep in her bosom. Small, indeed, was the funeral of the English officer's fair English mistress. But she was decently and quietly laid in her grave; for, despised as she had been when living, she was only pitied now, and no one chose to think but of her youth, her beauty, her pale and melancholy face, her humble mein, and acts of kindness and charity to the poor, whom she treated always as her superiors—for they, though in want, might be innocent, and she had gone far astray. Where, too, thought many, who saw the funeral pass by, where are her relations at this moment? No doubt, so pretty and elegant a being must have had many who once loved and were proud of her—but such thoughts passed by with the breeze—she was buried, and a plain stone laid over her according to her own desire: "HERE LIES HELEN EYRE, AN ORPHAN, AGED TWENTY-TWO YEARS."

There was one true Christian who had neither been afraid nor ashamed to visit Helen Eyre during the last weeks of her life, when it seemed almost certain that life was near its close.—This was Mrs. Montgomery, the widow of a country gentleman of good family, who had for some years resided in the town. This excellent woman knew Marmaduke Stanley, and was not a stranger to the circumstances of this unfortunate and guilty connection. On his departure, she had promised to take care that Helen Eyre should be looked after in her illness,—and when the hand of death lay upon the poor friendless orphan, she was frequently with her at her bed-side, administering comfort and consolation. Such kindness from such a person, at such a time, supported the soul of the dying mother when it was most desolate; it quieted all the natural fears of dissolution; and when she, whose own life had been a model of all that was good and beautiful and lofty in the female character, bent down over the penitent sinner and kissed her fair young brow, now cold and clammy in the death-throes, that christian kiss seemed to assure her that she might be forgiven; and, if God, as we believe, beholds the creatures he has made, it was registered in heaven.

Mrs. Montgomery took the infant into her own house—and had written, to inform its father of what had happened, when she read in a newspaper that, in a skirmish, Major Marmaduke Stanley had been killed. She then opened a letter he had left with her on his departure—and found that he had bequeathed his small fortune of four thousand pounds to Mrs. Montgomery, that she might settle it properly on the mother of his child, if she survived, if not, upon the infant.

The infant orphan was christened Helen Eyre, after its mother, whom, frail as she had been, there was no need that her child, at least, should ever disown. No one wished to have the baby that now belonged to none. And this excellent lady, from no whim, no caprice, no enthusiasm, but touched at the heart with its utter and forlorn helplessness, by sorrow for its poor mother's transgression and early fate, and by something of a maternal affection for its dead father, resolved to adopt Helen Eyre as her own child, and to educate her in a woman's accomplishments, and a Christian's faith. Some smiled—some disdained—and a few even blamed—the kindness that could rescue an orphan from an orphan's fate. Many, too, wondered, they knew not why, when it was known that Major Stanley had left all his fortune to Mrs. Montgomery for behoof of the child. But in a few months it was felt by every one, whatever they might choose to acknowledge, that the brave soldier had had a good heart, and that he had committed the interests of his orphan, even before she was born, to one whose character was summed up in that one word—a Christian.

It often seems as if those children who have fewest to love them in the world, grow up the most worthy of love. Here was an orphan—born in sin, in shame, and in sorrow—and now left alone on the earth—who grew up beautiful to all eyes, and captivating to all hearts. Before five summers had shone upon her blue eyes, the child was noticeable among all other children. Her mother had been lovely, and there was a time, too, it was said, when her presence had been welcome in the halls even of the noble, who had visited her parents in their pleasant dwelling beside their own Church. Her father, however deficient in more solid worth, had been the ornament of polished life; and it seemed as if nature preserved in this small and beautiful and graceful image the united attractions of both the unfortunate dead. The very loneliness of the sweet child, without a natural home in the world, could not but interest every good heart; but her exceeding beauty made an impression almost like that of love even upon the heartless—and "English Helen"—so she was familiarly called, to distinguish her from another child of the same Christian name at school, was a favourite with all. Besides, she was the adopted daughter of Mrs. Montgomery, and that added a charm even to her beauty, her sweetness, and her innocence.

The heart of Helen Eyre expanded, month after month, in the joy of its innocence, and felt the holy voice of nature whispering to it new feelings of love and affection. The children with whom she played had fathers and mothers, brothers and sisters, and many other friends. She had none. She loved the lady who was so good to her, and by whose bed she slept at night on her own small couch. But she knew that it was not her mother with whom she lived. She

had been told that both father and mother were dead; and sometimes the sweet child wept for those she had never seen, and of whom she knew nothing but that they had both been buried long ago. Something, sad and melancholy, therefore, mixed itself with youth's native gladness, and a corresponding expression settled itself about her eyes, and often smoothed the dimples on her smiling cheeks.—"English Helen's" own heart told often what she had often heard her childish companions say, that she was an orphan; but she knew that tho' that was something mournful, it could not be wicked, and that, therefore, people would pity her more—not love her less—because her father had been killed in the wars, and her mother had died, soon after she was born, of a broken heart.

One day, Helen Eyre had wandered with some of her companions into the church-yard, near the Old Tower, and attracted by the murmuring blossoms of a shady horse-chestnut tree, that hung its branches over several tombs and grave-stones, in a corner near the river side, she tripped into the shade, and letting fall her eyes upon a grey slab, she read there her own name, the inscription on her mother's grave.—She went home drowned in tears, and asked her guardian, if that was not the stone under which her mother was buried. The good old lady went with her to the church-yard, and they sat down together on that stone. Helen was now ten years old; and perhaps had heard, although she scarcely knew that she had, some dim intimations, in the language of her play-fellows, which they themselves had not understood, that she was "a natural child." Mrs. Montgomery spoke to her about her parents; and while the sweet child kept her weeping eyes fixed upon her face, as she spoke in a bewildered and perplexed grief, she came to know, at last, that her mother had been guilty of a great sin, but had been forgiven by God, and had died happy.—The child was told, too, although that she could scarcely believe, that some might love her less for that reason; but the truly good might love her the more, if she continued to be what she now was, innocent, sweet-tempered, and obedient to God's holy laws. "Your mother, Helen, was a kind, gentle, and religious being; and you must always think so, when you weep for her, here beside her grave, or elsewhere. When you are older, I will tell you more about her, and about your birth. But my beloved, my good, and my beautiful child, for I do not fear to call thee so, even to thy sweet face—be not ashamed—hold up your head, Helen, among your companions, and my hands, as long as I live, will dress for thee that guileless bosom, and tend the flowing of that glossy hair. I am your mother now, Helen; are you not willing to be my child?" The orphan could make no reply, for her little heart was full, almost to breaking—and she could only kiss the hand that took hers gently into it, and bathe it with happy and affectionate tears. They left the church-yard; and before they reached the sweet cottage on the river's side, Helen was gazing with delight on the Queen butterflies, as they for a moment expanded their rich, brown, mottled, and scarlet wings on the yellow lustre of the laburnums, and then glanced, careering away over the fruit trees, into other gardens, or up into the sunshine of the open day.

In Scotland there prevails, it is believed, a strong feeling of an indefinite kind towards those whose birth has been such as that of poor Helen Eyre. This feeling is different in different minds; but, perhaps, in very few, such as seems reconcilable with a true Christian spirit. Scorn and aversion towards the innocent, however modified, or restrained by better feelings, is not surely, in any circumstances, a temper of mind any where expressly recommended, or indirectly instilled by any passages in the New Testament; and, with reverence be it spoken, if we could imagine ourselves listening to the living Christ, we should not expect to hear from his lips lessons of contumely, or hard-heartedness to poor, simple, innocent, orphan children. The morality of society is not to be protected by the encouragement of any feelings which Christianity condemns; and as such is the constitution of this world, that the innocent often suffer for the guilty, that it is an awful consideration to deter from vice, but surely it is no reason for adding to the misfortunes of virtue. In coarse and vulgar minds this feeling towards illegitimate children is a loathing repugnance, and a bitter and angry scorn. And the name by which they call them is one that comes from their mouths steeped in human pride, as if there were in it an odious contamination. Alas! who are they that thus turn away with loathing from beings formed by God in his own image? Are they all pure—and innocent—and aloof from transgression? Or, may not in such cases the scorn of the despicable, the mean, the cruel, the ignorant and the licentious, fall upon the head of the generous, the just, the pure, the intelligent, the refined and the pious? It is often so. Now, society has its own laws, and they are often stern enough; but let them never, with the good, prevail against the laws of nature; and let every mind that entertains the feeling now alluded to, be cautious, in justice to itself and to a fellow creature, and in due reverence of a common Creator, to separate from it all undesired virulence, all unchristian contumely—all unbrotherly or unsisterly hatred, and then they will know how little it amounts, and how easily it must be forgotten in the contemplation of excellence;—and then, too, will they feel a far deeper compassion for them in whose minds that other rooted passion of contempt so rankly grows. There were many who wondered that Mrs. Montgomery could have adopted such an orphan. And with that coarse wonder they turned away from that noble, high-born, high-bred, and, what was far better, tender-hearted, compassionate, and pious lady, and from the beautiful creature at her side, rejoicing in protecting innocence and awakened intelligence, beneath the light of her gracious affection.

As Helen Eyre grew out of her sweet girlhood into the ripening beauty of her virgin prime, this feeling regarding her became somewhat stronger. For now there was the jealousy—the envy—and the spite of little minds, painfully conscious of their inferiority, and impatient of total eclipse. They had the tone of the world's most worldly heart on their side; and it was easy, pleasant, safe, and satisfactory, to hang a cloud over her by one single word, that could not be gained, when it was felt that in itself the flower was fragrant and most beautiful. Campbell has, in the simple words of genius, spoken of the "magic of a name"—so likewise is there a blight in a name—a blight which may not fall on its object, but which can wither up the best feelings of our nature, which the sight of that object was formed to cherish and expand. Helen by degrees instructed her heart in this knowledge, which from nature alone she never could have had; her guardian had told her the story of her birth; she read in books of persons situated as she was, and although sometimes her heart rebelled at what could not but appear to her most impious injustice, and although even sometimes she felt a sort of angry and obstinate pride, which she knew was wrong, yet such was the felicity of her nature, that the knowledge wrought no disturbance in her character; and she was now in her undisputed beauty, her acknowledged accomplishments, and her conscious innocence, humble and happy, sedate but not depressed, not too ready either with her smiles or tears, but prodigal of both when nature knocked at her heart, and asked admission there for grief or for joy.

Helen Eyre was no object of pity; for her bark had been drawn up into a quiet haven, and moored on a green shore overspread with flowers. Yet still she was an orphan, and the world wore a different aspect to her eyes from that which it presented to other young persons, with troops of friends and relations, bound to them by hereditary connections, or by the ties of blood. They had daily presented to them food for all the affections of the heart; their feelings had not either to sleep or else to be self-stirred, for a thousand pleasant occurrences were constantly touching them with almost unconscious delight. Life offered to them a succession of pleasures ready made to their hands, and they had but to bring to them hearts capable of enjoyment. Little demand is made on such as these, so long as health continues, and their worldly affairs are prosperous, to look often or deeply, or stealthily, into their own souls. But with this orphan the case was very different. She was often left alone, to commune with her own heart; and unless thoughts and feelings, and fancies rose up there, she must have been desolate. Her friends were not living beings of the same age, and with the same pursuits as herself, for of them she came at last to have but few, but they were still, calm, silent, pure, and holy thoughts, that passed in trains before her,

when the orphan was sitting in her solitude, with no one near to cheer her, or to disturb. When she read in the history of real life, or in the fictions of poetry, of characters who acted their parts well, and walked in the light of nature, beautiful and blest, or tried and triumphant in the fires of affliction, these she made the friends of her heart, and with these she would hold silent communion all the day long. No eyes seemed averted from her, no faces frowned, nor did any harsh voices rise up among the dead. All the good over whom the grave had closed were felt to be her friends; into that purified world no unkind feelings could intrude; and the orphan felt no bar to intervene between her beating heart, and those who were the objects of her profound and devout affection. From the slights, or the taunts, or the coldness of living acquaintances, Helen Eyre could always turn to these sacred intimacies or friendships, unbroken and unimpaired; she could bring a tender light from the world of memory to soften down the ruggedness or the asperity of present existence; and thus, while she was in one sense an orphan, almost alone in life, in another she was the child of a family, noble, rich, powerful, great, and good.

Or such happy nature, and trained by the wisdom of the youthful innocence to such habits of emotion and thought, Helen Eyre felt—but not keenly—the gradual falling off and decay of almost all her school friendships. Some of her companions left that part of the country altogether, and she heard of them no more—some went home in the neighbourhood, and in a short time recognised her when they chanced to meet by a civil smile, question, curtesy, or shake of the hand, and no more—some seemed to forget her altogether, or to be afraid to remember her—and some treated her with a condescending, and patronising, and ostentatious kindness, which she easily understood to be a mixture of fear, shame, and pride. Such things as these Helen generally felt to be trifles; nor did they permanently affect her peace. But sometimes, when her heart, like that of others, desired a homely, a human and a lowly happiness, and was willing to unite itself in that happiness with one and all of its useful friends, whoever they might be, poor Helen could not but feel the cruelty and injustice of such alienation, and perhaps may have wept unseen, to think that she was not allowed to share the affection even of the vulgar, the ignorant, and the mean. Many who at school, before they had learned the lessons of the world, truly and conscientiously loved her, and were grateful to "English Helen" for the assistance she lent them in their various tasks, and for her sweet and obliging disposition in all things, began now to keep down their natural emotions towards her, and to give way to the common sentiment. Tawdry misses, destitute of all accomplishments, and ignorant of all knowledge needful or graceful to woman's soul, were ashamed to be thought friends of Helen Eyre, and thought it necessary to explain that she was only an acquaintance when they were at the Oliver's Boarding-school, adding, that she was to be pitied, for that although, like all persons in her situation, she was excessively proud, yet she was certainly very clever, and did not want her.

No doubt, it would have been nothing very remarkable, had Helen Eyre, under such circumstances, become what such excellent judges esteemed her to be, irritable, unamiable, and proud. This treatment might have soured her disposition, and armed her against an unjust and cruel world. Some struggles she may have had against such feelings; for she was not without her frailties and imperfections; her cheek may have flushed, and her heart beat with indignation, when insulted by overweening civility, or spiteful scorn. Though she felt pride to be a vice, so was meanness; and orphan as she was, and illegitimate too, conscious innocence and virtue, good will to her fellow-creatures, and piety to her Creator, gave her rights and privileges which were entitled to respect, and which, without blame, she might vindicate, when slighted, insulted or abused.—Therefore, though humble, she was not abased, and a mild pensive dignity overspread all her demeanour, which abased the mean and won the commendation of all whose souls possessed a single spark of native nobility. Indeed, in her presence it was no easy matter to maintain or put into practice those unchristian principles which, when she was absent, burst forth in all their abject and slavish violence.

Her guardian, protector, and mother, Mrs. Montgomery, was a woman who did not pretend to be altogether free from those prejudices, or feelings—which she knew were too often carried to a sinful degree. But having had Helen put into her arms when an infant, out of the yet warm bosom of her dead mother, she had then felt but as a human being and a Christian towards a helpless child. Affection kept pace with Helen's growth, beauty, virtues, and accomplishments; and not the slightest feeling now overcast her love. It had long been extinguished by the power of innocence and joy; and the knowledge of the strength of such prejudices in the minds of others had now only the effect of increasing her pride in her dear orphan, and of adding a holier tenderness to her protecting love.—"Shall she be despised whom every morning and every night I see on her knees before her God—she whom that God has created so good and so beautiful—and would die for the sake of my old grey hairs?" There was no occasion to conceal one thought from Helen Eyre—she knew her situation now perfectly and wisely—she acknowledged that her parent's sins were a misfortune to her—she was willing to bear the burden of their errors—to suffer what must be suffered—and to enjoy meekly, humbly, and gratefully, what might be enjoyed. Were all the world to despise her—such was her gratitude and affection to her mother, that in that alone she could be satisfied—to live for her—to tend her declining age—and if surviving her, to dedicate her retired life to her memory.

But there was one whom Helen Eyre could call her friend; one as young, as innocent, almost as beautiful as herself, and that was Constance Beaumont. Constance was the daughter of an old, indeed a noble family, and her mother, although justly proud of her rank in society, had not discountenanced her childish friendship with Helen, who lived under the roof of one of her own most respected friends. Still, this was a friendship which she had wished in heart might insensibly fade away as her daughter advanced in life; for although her nature was above all misere, yet she properly wished that the heart of her only daughter should be among her own kin, and that its deepest and tenderest sympathy should not be drawn away from the bosom of her own family;—She had cheerfully allowed Constance to bring Helen to the Hirst during the vacations, and she could not but love the sweet orphan.—She saw that her daughter could never learn anything bad, or mean, or vulgar, from such a companion, but, on the contrary, could not fail to have every virtue expanded, and every accomplishment heightened, by communication with one to whom nature had been so lavish in her endowments. Mrs. Beaumont had too much good feeling, and too much good sense, to seek to break off such friendship in her riper years; but it could scarcely be called blameable if she wished and hoped in her heart, that its passionate warmth might be abated. She had another reason for desiring this, which she scarcely yet owned to her own heart—she had an only son, whose education in England was now completed, and who, she feared, might love Helen Eyre. The thought of such an alliance was unendurable—and Mrs. Beaumont believed, that dearly as she loved her son, she would rather see him in his grave, than married to an illegitimate orphan.

That such was the state of this lady's mind Helen Eyre had too true a sense of her own condition not to know. Of her thoughts respecting her son, indeed, she in her thoughtless innocence could suspect nothing, nor had she ever seen him but once when he was a school-boy. But she knew that Mrs. Beaumont was proud—though not offensively so—of her own ancestry and of her dead husband's; indeed, her state never left the spacious and rich rooms of the Hirst, and its gallery of old ancestral portraits, without a feeling, not of depression arising from her own insignificance, but of wide distance at which she stood in rank from her best-beloved friend and sister, the amiable and graceful Constance. Neither could she help feeling that Constance must feel this too; and every time she met or parted with her, there was now a faint sadness at her heart, and something that seemed to forbode separation,

But Constance Beaumont was too high-born to fear making a friend of one on whose birth there was a stain, even if she had not been too high-minded to suffer such a cause to interrupt their friendship. Strong and secure in her own high rank, and stronger and more secure still in her own nature, no sooner did she discern the full extent of the general sentiment entertained towards Helen Eyre on the score of her birth, than every warm, pure, disinterested, and passionate emotion of her soul rose up yearning towards her, and she vowed, that as Helen had been the blessing of her childhood and early youth, so should her heart be bound to her all life long, and own her at all times and in all places, with affection, gratitude, and pride. Accordingly, she never was in the town where Helen resided, without visiting her—she kept up a constant and affectionate correspondence with her—she insisted on seeing her frequently at the Hirst—and often, often, with all the joyfulfulness of lovers did these two beautiful and happy creatures meet, almost by stealth, in the woods and groves, and among the gently sloping hills, to enjoy a solitary and of impassioned friendship. Constance would not have obeyed her mother in any positive injunction; of those sternly assignments she was conscious that her mother would not have approved; but were the best and sweetest, of all natural feelings to give way to a faint consideration of doubtful duty? Could such disobedience be called wrong? And if it were so, might not the fault be repeated over and over again without remorse or self-upbraiding? So Constance felt and so she acted—nor in thus being a dutiful friend, is there any reason to believe that she was an ungrateful daughter.

(To be concluded in our next.)

WORKING CAST STEEL.—We have recently obtained information on this subject, from the most skillful and celebrated workman in the United States, Capt. J. Hill, of Melrose, Mass. We were a little surprised to learn the difference in the management of cast steel, from that of the iron.—There is something yet remaining mysterious in regard to the nature and management of this article, which no cyclopedia or other vehicle of intelligence has as yet developed. The process of manufacturing cast steel, is our purpose at present to describe; but it is evidently composed of refined iron, and carbon in very nice proportions. In the process of shaping it into cutting blades and other articles, it is heated and hammered in the manner of wrought steel: when tempered for this purpose, it is first heated to a full cherry red, and plunged into water till cold. It is then held over a moderate charcoal fire, until the surface of any part which has been filed or made bright after tempering, changes to a reddish orange colour. This is the temper for cutting tools; but if a spring temper is required, it is heated over the charcoal till the color approaches blue or rather, blue inclining to red. In either case, when the steel is brought to show these colors, it is to be plunged in oil,—common lamp or linseed oil,—which will not affect the color. If the steel is to be rendered soft, for turning or cutting, it must be heated to a full red, and left to cool in a specially ignited charcoal; in this way it may be made so soft as to be cut or turned into shape as easily as copper, or even common pewter. But the most curious and peculiar process is that of welding. In welding iron, a white heat is indispensable, as every body knows; but not so with cast steel. When the steel is to be welded to iron, neither is to be heated above a full cherry red. The two parts are to be previously lashed or gripped together, and in that condition heated: they have then only to be immersed in calcined borax; or to have the prepared borax (borate of soda) sprinkled over the joint, and are ready to adhere by being hammered together.—The borax for this purpose is to be prepared by being previously heated to a full red, and kept heated till it becomes a soft powder like flour. What the chemical effect of the calcined borax on the metallic surfaces is, is not perfectly understood, farther than that its affinity for oxygen is such as to deprive the jointed surfaces of any portion of oxygen which might prevent a ready union of the surfaces. When small pieces of steel are to be welded, they are to be heated to the full cherry red, and immersed in the calcined borax, and are then hammered together.—The most extraordinary point in this process is the fact, that the steel is but a little over-heated, it will immediately crack into fragments; but by a shifted process, and with the use of borax, the cracks and defects may be healed and rendered sound and solid. We have witnessed the fact, that a judicious management, a fine tempered cutting edge of cast steel may be bent, warped and hammered, and its shape materially changed without breaking, or effecting the temper. More may be said on this subject in a future number; but we close for the present with the remark, that even Anderson & Co., the celebrated manufacturers of cast steel, are evidently unacquainted with all the merits of its peculiar properties.—*American Mechanic.*

The calcined borax melts and forms a fluid glass, which prevents the access of the air. It is always used for this purpose in soldering gold and silver. Rosin is used for the same purpose in soldering tin. Heated metal exposed to the air becomes rusted.

CHEAP ROOFS.—The simple mode of roofing outdoors by nailing thin boards on light rafters may be introduced to very great advantage, particularly in the country. It is only to subject the boards, before using, to the action of fire, by way of thoroughly seasoning them. Nail them on immediately, and cover them with sheathing paper and a dressing of tar; and covering, almost for a lifetime, may be calculated upon. The rafters, three inches deep, six and a half thick; the boards half an inch thick, straightened on the edges and closely nailed.

The following composition for covering such a roof was employed at Wickham, twenty years ago, and is at this present time as good as when first laid. The roof is nearly flat, having a run of one inch only to the foot, the boards being securely nailed and covered with a course of sheathing paper, such as is used under the copper-sheathing of ships, made fast by small flat-headed nails. To eight gallons of common tar, add two gallons of Roman cement, five pounds of resin, and three pounds of tallow; boil and well stir the ingredients, so as thoroughly to incorporate them, and lay on the roof while hot with sharp sifted sand, and when cold, tar and sand as before; after which, a single coat of tar will in five or six years will preserve the roof for an age.

To the above may be added an incombustible impervious wash, prepared according to the following directions. Slake stone lime with hot water in a tub, covering it to keep in the steam; pass six quarts of it through a sieve, and being in the state of fine dry powder, and add to it one quart of fine salt and two gallons of water, boiling and skimming it. To every five gallons of this boiled mixture, add one pound of alum, half a pound of copperas; and if slow degrees, half a pound of potash and four quarts of fine sharp sand. The mixture will now admit of any coloring matter that might be preferred, and is to be applied with a brush. It looks better than paint, and is as durable as stone. It will stop leaks in the roof, prevent the moss from growing, and injuring the wood, rendering it incombustible, and when laid upon brick-work, causing it to become impervious to rain or moisture.—*Farmer's Cabinet.*

THE PAPAL CALENDAR for the current year gives the following items of intelligence. The present Pope, Gregory the 16th, will complete his 77th year on the 18th of the month—having passed into the 11th year of his Pontificate. There are now 60 Cardinals, 6 Cardinal Bishops, 43 Cardinals Priests, and 11 Cardinal Deacons.—Rupi, the oldest Cardinal, is 87, and Schwartzberg, the youngest, 33. The ages of all the Cardinals make 3,580 years.

A GRAND SIGHT.—The country on the Missouri, above L'Eau-qui-court, is nearly bare of timber.—The river bottoms are narrow, and the ground, generally, high bluff prairies. This open, bare country, is, at times, as far as the eye extends in every direction, blackened with buffalo. It has been estimated that fifteen or twenty thousand may sometimes be seen at a glance!