A MEXICAN FUNERAL.

GHASTLY SCENES IN THE CHARNEL YARD.

Rented Graves and Borrowed Coffins—Neither Wife, Mother nor Sister Allowed at the Funeral.

[Special Correspondence of the RECORD-UNION.]
MEXICO, November 6, 1885.

The days of "All Saints" and "All Souls," through which we have just been passing, are the saddest of the year to religious Mexico—and that means everybody of Latin blood within her borders. In our own older Republic few church ceremonials, unless it may be those of Christmas and Easter, call for special observance from the people at large; but in Mexico, —notwithstanding the "new epoch" in which the State, instead of the Church, is supposed to rule—the latter is still the all-prevailing power. The "holy days" in her calendar out-number the days of the year; but among them all none touches the public heart so deeply as those two days dedevoted to the dead. "Black Friday"—commemorative of the crucifixion—is sad enough, for on that day no sound of wheel or hammer or human labor is heard, no carts or carriages are permitted on the streets, and the whole nation, dressed in black, goes to church to mourn with the virgin mother. But that far-away tragedy, with nearly nineteen hundred years between, does not come home to all hearts like the

COMMON SORROW OF EVERY HOUSEHOLD,

For death is alike a tragedy in palace or hotel, in the home of the highest Don, or in the family of the untutored Indian, who has only mother earth for a bed and the blue sky for a covering.

On All Saints' day, immediately after early mass, the people crowd the cemeteries, and it is about the only day in all the year when the cities of the dead are ever visited, except by sight-seeking tourists. But this day, solemn though it be, is more especially devoted to the remembrance of those who died in other years, the saints and martyrs, and "glorious army of just men made perfect," who are supposed to have safely passed the pains of purgatory and long since become acclimated to the atmosphere of heaven.

On All Souls' day people pray in the churches, each for his own dead, and every family in the land, high and low, rich and poor, sends lamenting Rachels, for true indeed it is that

There is no flock, however watched and tended,
But some dead lamb is there.

Cathedral scenes on that day are long to be remembered. For hours the bells tolled dismally and the streets were filled with mourning figures, with black shawls or *rebosas* covering their faces, silently wending their way to the place of prayer. In the center of each darkened church, the black-palled funeral dias was erected, with its flickering candles and grim suggestions. The altars were draped with crape, the usual gaudy paper roses replaced by black ones, and sombre banners bore (in Spanish) the words,

"REMEMBER THE DEAD."

The kneeling crowd, all with devout faces tured toward the cross—the symbol of their hope—repeated their prayers so earnestly that the united murmur sounded like the distant roaring of the sea. They were mostly of that sex who are "first at the cross and last at the tomb," and it was easy to read in the upturned countenances whose sorrows were freshest. There were orphaned children, the widow in her weeds, the white-haired mother bereft of sons and daughters—every face had its history. And it did not detract from the solemnity of the occasion to know that the floor of the sanctuary in which we knelt was a succession of trap-doors, covering vaults filled to the brim with bones of two centuries' dead.

A Mexican funeral is very different from the same sad ceremony in the United States, for here all that is ghastly is brought to the front, and every cheering suggestion carefully excluded. Apparently these people mean to enjoy the "luxury of grief" to the full, and decline to be robbed of a single pang. Here no floral tributes are sent by sympathizing friends—no pillows of white carnations, with "Rest" in purple immortelles, nor crosses and anchors of spotless lilies, and the dear departed are not laid away in beds of roses with white blossoms upon their bosoms. If flowers are used at all, they are generally the most gaudy of artificials, with leaves and streamers of gilt paper—precisely like those fastened to iron hooks which are thrust into the bulls' hide at the Sunday *divertissement* of the Plaza de Torros. I have seen a bunch of these monstrosities as big as a cabbage in the waxen hands of a dead baby, and a wreath of blood-red roses crowning the gray head of an old man—which gave the poor corpse a rakish air most comically grotesque.

At whatever hour of the day or night a person dies in Mexico, it is customary to appoint the funeral services just twenty-four hours thereafter, or as near to it as can possibly be arranged. It is a well-known fact the world over that the majority of souls go out of the body at the mystic hour between night and dawn, when all the forces of life are at their lowest ebb; and therefore, in consequence of the national custom aforesaid, most funerals are conducted before sunrise. About the saddest sights I ever saw, enough

TO MAKE ANY MOTHER'S HEART ACHE,

Are frequently met in the twilight of the early morning; a little procession of men on foot, with seldom a woman among them, wending their way to the Campo Santo, or "Field of Saints," as the cemetery is called. The bereaved father marches in advance, with the little blue coffin balanced on his head, while male relatives follow with lighted candles, and the rear is brought up by a boy carrying the coffin-lid. The dead child is plainly visible within the gaily-painted box, wearing its brightest garments, garnished with many paper flowers, and often the little features are hardly recognizable from the dust of the street that has settled upon it before the "dust to dust" process begins.

All bodies must be carried to the church before being laid in consecrated ground, but it is not the fashion here for women to attend funerals, nor to follow their dead to the cemeteries. So the wife, the mother, the sisters, the daughter, take their last farewell *en casa*, and the corpse is then borne away by male relatives—first to the sanctuary and then to the sepulchre. How mothers can endure this, when their children die passeth American understanding; but the iron hand of custom is far more inexorable here than in our own country, and none dream of defying it. At my first visit to a Mexican "field of saints," I learned the wisdom of excluding women from the last horrible rites. Except among the wealthy the coffin is not buried with the body, but is merely rented for the journey between the house and cemetery, the same pine box (which for adults is usually painted black, with white or yellow stripes), serving the same purpose a great many times. Arriving at the grave, whether the body is interred with or without a coffin, it is always first covered with lime, that it may the more quickly decompose. In the majority of cases the corpse is taken out of the coffin, laid in the dirt without any covering (often the sightless eyes wide open), a quantity of unslacked lime thrown in and earth shoveled upon it, the sexton now and then jumping in and stamping the dirt down with his feet, to make all snug and secure. Even then, though buried like a dog, the poor cadaver cannot be said to have gone to his "long home," for he is

NOT SURE OF HIS GRAVE

Time enough to decay decently in. It is an actual fact, all over the length and breadth of Mexico, that (except among the few who are rich enough to own family vaults) the graves are mostly rented, for periods varying from three months to a year's time. Many of these ancient cities have only one Campo Santo—a veritable "God's acre" as to size—wherein the dead of several hundred years have been somehow disposed of. That is the secret of the quick-lime. I have looked down into many freshly-dug graves, and all presented the same appearance—the sides a perfect sandwich of layers upon layers of crumbling bones and bits of coffins, which the spade had cut through, looking like huge slices of chicken salad or old-fashioned "marble" cake! It is doubtful, indeed, whether the Scriptures can be fulfilled in this country in regard to the gathering together of "dry bones" on the resurrection morning. But these good Catholics do not believe in that idea. They think the body is of no consequence after the soul has been safely prayed through purgatory, and to them there is no sense of sacredness connected with the clay casket after its jewel is gone.

When the time has expired for which the grave was rented, the occupant is unceremoniously shoveled out to make room for a new tenant. If the time has been long enough—thanks to the lime—there is little left to evict; but the three months allowed to the vast majority in which to decay, is not time enough in obstinate cases. Bones are sometimes unearthed not yet quite bare of flesh, and skulls with capillary adornments still clinging to them. In walking through these Campo Santos, one comes upon such cheerful sights as sections of vertebræ, ribs, marrow bones,

BITS OF SHROUDS AND BROKEN COFFINS

At every step. But this is by no means the worst of it. In the rear of each graveyard is a smaller inclosure, which had better not be visited by persons of shaky nerve. The first glimpse is warranted to make the strongest man forego his dinner; but one can get accustomed to all manner of things, you know, and generally ends—as I did—by poking over the bones with an umbrella to find a nice white skull for an ink-bottle! The bones are carted to this charnel yard and left in heaps till the annual cremation time comes around, when they are burned to ashes and left for the winds to scatter. Poor Gabriel—what a time he will have of it on that great day in trying to fulfill his contract! Golgotha must have been an Eden to the place we lately visited. Every step showed a new horror. There were scores of well-preserved coffins, still half-full of the lime which had failed to complete its work, mixed with shreds of grave-clothes, their gay colors scarcely faded. Scattered about were babies' tiny shoes; leather enough in half-decayed boots and slippers to set up St. Crispin in trade; women's combs and other paraphernalia; skulls of all sizes, and piles of bones in the corners of the wall higher than a man's head. We noticed a skull matted with long, gray hair; another with a long, black tress attached, which doubtless loving hands have caressed in other days; and dozens of smaller heads—white and shining like ivory—evidently those of children. Naturally the stench is sometimes intolerable—enough to give the whole country the cholera in any other atmosphere; and as in this mountainous land the Campo Santos are generally located on hills out-lying the cities, it is not to be wondered at that the residents immediately below, who

RECEIVE THE WASHINGS INTO THEIR WELLS,

Die off like sheep at certain seasons of the year. The other day a prominent citizen died, and Betsy and I determined to attend the funeral, notwithstanding the custom excluding women. The cathedrals are always open, and under pretext of performing our devotions unusually early, we hied us thither. Imagine a gray November morning, at the "witch-hour" of 5; a dim old church full of ghostly shadows, with here and there some conscience-stricken creature kneeling upon the floor in penitential prayer, or whispering at confessional windows. The funeral pyramid—pine boards painted black, ornamented with skulls and crossbones, and *momenti mora* inscriptions—occupied the center of the church. This pyramid and its four side pieces, which are shaped exactly like coffins, was stuck full of sputtering candles, in whose flickering light the shadows swayed to and fro, like ghostly visitants trailing their shrouds behind them, getting ready to return to the vaults below after a nocturnal revel. For Betsy's encouragement, I whispered that cheerful stanza:

Somwhere, in desolate, wind-swept space—
In twilight land—in "no man's" land—
Two shivering shapes met, face to face,
And bid each other stand.
"And who are you?" cries one agape,
Shuddering in the gloaming light;
"I know not," said the second shape—
"I only died last night!"

Now the funeral procession enters (of course all men), who bear the coffin upon their shoulders and deposit it upon a black-palled dais in front of the pyramid. As usual, there is no cover upon the coffin, and the wide-open eyes, with no more "speculation" in them, stare straight up at the great white cross above the main altar. But the blood-stained Christ thereon gives no sign to that unhoused soul, which seems to say, "This day shalt thou be with me in paradise." At the side of the cathedral an image of the Virgin of Sorrows, with clasped hands and a dagger sticking in her heart, looks down upon the dead man, as if mourning in place of the wife and mother who should be there.

A procession of white-robed priests enters, preceded by a boy bearing a huge brass crucifix, which he stands at the head of the coffin. Then follows a long mass, chanted by the priests in monotonous minor tones—as wierd as any Indian incantation in the wilds of our own northwest; while much holy water is sprinkled, and burning incense shaken, till the whole vast pile is full of spicy odors. Meantime the sun has risen, and his first beams—penetrating a barred window high up under the roof—fall aslant the crucified Savior, about whose feet some white doves, who make their home in the church, are joyously twittering. Gazing upon that symbol of the Christians' faith, we fall to wondering—with the unutterable longing all human hearts feel in presence of the dread mystery of death—whether the innumerable procession of dead who have

"DIED IN THE LORD"

During all that eighteen centuries are better off to-day, now that their bodies are dust, than equally devout followers of Buddha, Mohammed, Confucius or Quetzalcoatl?

Now all that can be said or done for the dead man here below is accomplished—and on the shoulders of those who yesterday were friends and neighbors of this inscrutable thing now called "It," the coffin is borne toward the Campo Santo, followed by the multitude on foot, each with his lighted candle. "Come," whispers Betsy, "we have caught 'blues' enough this morning to last us a week."

Outside a gentle shower is just passing over, and a rainbow arches the ancient city, its ends appearing to rest upon the mountain tops at either side. Looking down the narrow street at the vanishing procession, our thoughts revert to the weeping women in the desolate home, who may not even accompany their beloved on his last short journey. But the rainbow spanning the skies is an auspicious omen. "I am the resurrection and the life; whosoever believeth on me, though dead, shall live again." Though death and sorrow is the common heritage, the promise endures for all lands, and we must believe that somehow—somewhere—it will be fulfilled.

FANNIE B. WARD.

ABOUT THE BOSTON GIRLS.—A gentleman who was apparently rather deeply tinged with the prevalent Anglomania was at a watering-place discanting upon the superiority of English over American scenery. "There really is no finished scenery in this country," he was pleased to observe; "of course, the Palisades, on the Hudson, are very well made, but——" "Yes," crisply and dryly interpolated the clever Boston girl whom he was favoring with his conversation, "I think they are—considering who made them." Another Boston girl was at a New York reception. "So you are from Boston?" said a young gentleman to her. "Oh, dear!" she replied, with an accent of despair, "how did you know? I'm sure I tried hard enough to conceal it." "To conceal it," he replied, with a puzzled air; "surely you are not ashamed of it?" "Oh, no," replied she, with engaging candor; "but I thought everybody would be afraid to talk with me if they knew I was from Boston."—[New York Tribune.

ESSENTIAL FOOD OF PLANTS.—While it is positively known that plants require carbon, hydrogen, oxygen and nitrogen as constituents of their food, there are several other elements found in plants whose essential character is not so certainly established. Some recent experiments, according to Mr. T. Jameson, an English chemist, furnish proof that sulphur is not an essential, that even lime and magnesia are of doubtful necessity, but that phosphorus and potassium are indispensable. Iron and chlorine occur in plants, but have little claim to be regarded as essentials.

NEW YORK GOSSIP.

THE NATIONAL HORSE SHOW AT MADISON SQUARE GARDEN.

Theaters and Music—Election Retrospect—The Predicament of a Manager—General Notes.

[Correspondence of the RECORD UNION.]
NEW YORK, November 7, 1885.

The election being over and the fog partly blown away, I find that nobody knows just how the result was attained, except by the power of votes for one in excess of another, which, as Nasby would say, is "resing anuff fur a Dimicrat." To tell you just how it is is to say that here in "Manhattandom" we know no more about it than you in the Golden State. The chief cause may be set down, though, to the sober second thought of the Democrats. They wanted, many of the true blues, to punish the Hill wing, but it wouldn't do, you know, to give the Administration such a blow from the shoulder just now—there's too much to hope for from Cleveland yet. But really, the election was tame. I do not remember so spiritless a one in the last ten years. For a really breezy polling day, we went back on our reputation sadly. I spent all day at precinct polls, and saw no great manifestation of enthusiasm anywhere. That night Tammany had a big rejoicing time around at the old hall. But even in that, there was more of formality than of heart. The truth, low down, is that our local Democrats are frightened half out of their wits by the course of the Administration on the civil service reform. There is not one in ten of the hard-shells who are friendly to the policy, and disguise it as they please the ugly fact crops out.

SOCIAL QUIET—AMUSEMENTS.

Socially there is little new—the season, you know, is between hay and grass, when the society people have not laid out their plans for the festive season. But with the opening of the second fortnight of the month, we look for receiving and dancing and marrying fashionables to blossom out, and from that on to the middle of March there will be life in society circles.

The theaters have been the centers of attraction thus far in "the fall o' the year," and they have all done well and some of them better. There's Daly's, the Star, Wallacks and Casino that have been coining money. Judic makes her last appearance at the latter temple of folly Monday night. At the Star the only Anderson has been the delight of Abbey and the public alike. She has been before us now these three weeks and over, and the public does not tire of her chaste acting and classical reading. Monday night we are to see her as Juliet, in which, perhaps, she is without a peer at this date. Anderson leaves us in two weeks and takes up a route that will finally bring her to your coast, and probably to your city. Nevada's grand concerts, with the support of Vergnet, Buli and Casti, have been the fashionable, and the costly things, too, of the week. The little lady and her bridegroom will be on their way to you contemporaneous with this letter. You Westerners have heard her, but I think not to good advantage. Nevada's strength is not in opera. On the concert stage she is better in all respects, has the conditions all at her own command, and can manage success that the inflexible rules of the lyric stage deny her. Salvini, at the Metropolitan, gave us Othello this afternoon, and it was my good fortune to have the half-holiday at my fingers' ends, and I devoted it to Salvini. I could wish you no higher or more soul-satisfying dramatic luxury than that you might witness one of his personations. Minnie Maddern, who has a management that understands the greatest of all arts, has closed out her business after two months, nearly, of financial success, and turns her pretty toes westward, with designs intent upon the California public.

MUSICAL.

While the refitted Academy has given us Italian opera, with Minnie Hauk and Ravelli in "Carmen," at least a numerically strong company supporting, the real music connoisseurs have pinned their faith to the hem of Mr. Thomas' superb orchestra, with the interspersed vocalization of that splendid singer, Mme. Fursch-Madi. We are to have these concerts fortnightly for the whole winter—a delightful outlook for those whose love of musical expression rages and is not to be sated. By the way, the story goes that the violation of the rules of the Musical Protective Union cost Thomas the nice little sum of $750 on the opening of the season. It appears that he brought over with him, when last he came from Europe, an instrumentalist of high accomplishments, upon whom he depended for certain oboe passages that none on this side the water can interpret as does this new importation. The laws of this tyrannical "Trade Union" prohibit its members playing in any sort of a company, or for any occasion where an admission is charged, with a non-member. All of Thomas' men are "Unionists," and not until the first concert was announced, and the house lighted for the entertainment, did the seventy-five fiddlers and horn-blowers notify him that the society refused to suspend its rules and admit the foreigner. Indeed, said they, it can't do so, because a constitutional mandate requires three months'—or six, I forget which—residence on this sod as a prerequisite. If they played with the oboist it would cost them $10 each in the way of fine, and for a second offense $20 each, and so on in increasing ratio until their little all would not suffice to pay the punishment.

THE AIR WAS BLUE

For a time, but there was no help for it, and Theodore paid the $750, the $10 fine of each man. Whether he came down $1,500 for Thursday's matinee or withdrew the artist I am unable to say. Speaking of theatrical matters, Wallack did a brave thing the other day. Daly, the somber but unsurpassed manager, had announced that no tickets purchased of sidewalk speculators would be received at his door. This ended an intolerable nuisance for the people who go to see "The Magistrate." Wallack, more pugnacious, resolved to appeal to the law. He laid a complaint before the Police Board, claiming that the licenses of the speculators do not entitle them to use the entrance sidewalks to places of amusement. The other theatrical managers, *uno animo*, united with him, and as a result the mandate has gone forth to the police to suppress the speculators and ticket-peddlers of every degree. In the line of entertainments we are to have something unique and decidedly new, beginning on the 17th inst., when the Woman's Crazy Work Show and Fine Needle Work Exhibition is to open at Masonic Hall, with a thousand premiums as inducements to cunning fingers to compete. The affair has the countenance and support of some of our leading women, whose names are quite guarantee enough of the character of the management. It is anticipated that it will be the most novel exhibition of handiwork ever attempted on these shores, and I shall, though not versed in the ways of embroidery and such like, manage to attend and tell you something of the curiosities to be seen.

THE NATIONAL HORSE SHOW

At Madison-Square Garden has been one of the greatest successes. It opened on election day, and while there was great disappointment that Parole—announced on the list—was not there, on account of sickness (even the equine stars are sometimes "indisposed"), yet there was enough to see, goodness knows. To the lover of fine horses the show was a perfect revel—and who does not love a splendid servant of that kind? tell me. I might fill a page of your journal with even a slender review of the exhibits. There were over four hundred horses on exhibition. You, who have had such splendid stock exhibitions at your State Fairs, and the last of which I was so fortunate as to witness, can form some idea of what this National Horse Show was, with 400 of the choicest animals the Atlantic side can bring together. Unlike most fairs, it opened with judging the animals and testing those trained to special service. The Fire Department exhibit was the first on the list, and it was something marvelous, in its way, to witness its exercise. The two giant draught horses of 2,100 and 2,400 pounds weight respectively were among the wonders of the show; but I remember one or two at Sacramento, when I was out there in September, that were quite as heavy, or appeared so. As people love contrasts, and the more extreme the better, so they divided attention very evenly between the exhibit of ponies and dwarf animals, and their gigantic brethren. The exhibition of thoroughbreds was exceedingly fine—I can't even pause to say how much of a treat it was—and next in importance was the exposure of matched and single roadsters. The trotters I rate as third on the list of excellence. For reasons that will be readily appreciated, some of the rarest, speedy and fine bred trotters could not be brought to us—the risk and cost are great, and then owners at this season are more than usually careful of such stock. But the showing of trotting colts was "first class." The saddle-horse exhibit was rather light for New York, where so many fine animals of this kind are grouped; but there was nothing lacking in the way of carriage and coach horses.

THE OBELISK

In Central Park has just been given a coating of paraffine to save it from decay under the trials of this climate. It has been crumbling very fast, and it is not likely that it would have held together two years longer. Two hundredweight of the paraffine was used, and that of the very best quality to be prepared. I have my doubts about the efficacy of the application. Dr. Hague, whom I met on the ground while the work was going on, said to me that it was evident the rotting of the stone had been going on very much more rapidly than any one had supposed. I gathered from his remarks, as well as from statements made by Caffall, who superintended the work, that grave doubts are entertained if the shaft can be preserved in the open air, by any means.

GENERAL NOTES.

I do not propose to trouble you with any remarks about Ward. That "grand rascal" has gone to Sing Sing, and shares his cell with a would-be murderer, and serves him right, well right too, There is not half the consideration and thought given to the fellow and his fate here that the papers would have you believe.

It may be of interest to compositors to learn that the late type-setting race did not satisfy "the boys." On the contrary, it only whetted eager appetite, and they have arranged for another contest to take place early in December between McGann of the *Herald* and Barnes of the *World*. The rules prescribe solid minion and four hours of time. Paragraphs will be ignored, as also stick-emptiers. The men "go" for $500, and unless I miss my guess, Barnes, a fast man—in composition, of course—such as few offices have, will handle the most money for Christmas favors this year. He is about the only type-setter I know, who has absolutely no "false motions."

Columbia College has accepted the endowment of $10,000 and over, made by Professor Tyndall, of London, to establish a fellowship for the encouragement of research in physics. The Fellow who receives the appointment will not get a large sum annually for his labors, for 6 per cent. will give him less than $700. But there is no requirement, I believe, that he shall devote his whole time to the work. No man fit for the place can do so for the salary guaranteed. Some men of wealth should supplement the endowment with as much more.

A new society has been formed here that deserves notice as a curiosity in the order of co-operative effort to better the condition of humankind. It is known and incorporated as the "Working Girls' Society." It is intended to widen the opportunities of working girls in this city to take summer vacations, and to enable them to get the most "summer" possible for the least money. There is not a male beast named among the incorporators—the girls propose to run this machine, for one, singly and alone. The very organization should suggest to some rich bachelor—and we have a host in New York who can't contrive to spend their incomes—the golden opportunity this society offers for him to do a world of good by just plumping $10,000 or $15,000 into their open-air fund. How it would encourage these poor and worthy toilers.

The Freedmen's Aid Society of the Methodist Church is not a noisy association, and is little heard from. But in less than two decades it has used over one and a half million dollars in educating ministers and physicians and maintaining industrial schools among the freedmen of the South, and it has accumulated over $700,000 worth of real property. It has educated 100,000 young men and women, who have taught more than a million of colored children in the South. It has forty-five educational institutions with 216 teachers and 5,970 students to-day. This society last night celebrated its eighteenth anniversary at the Park Avenue Church. I spent an hour there last evening, agreeably entertained and surprised at the recital of statistics, of which I have given you a glance.

I happened to run across a procession last night on its way to the Jersey City ferry, to take a line west for Utah. It was a body of 248 women converts landed yesterday from an Atlantic steamer. Several "Elders" were bossing the party. They were a sturdy-looking lot of people, with a large proportion of children. I should take them to be Swedes mostly. One of the accompanying missionaries informed me that they were chiefly agriculturists and gardeners, but that among them were some skilled workmen, such as brass-finishers, watchmakers and machinists. I ventured the inquiry as to whether these new arrivals—who appeared to be very much superior to the ordinary run—were already confirmed in belief of the holiness of plural marriage. The missionary's mouth shut up like a trap, and with a turn on his heel he was off on the pretext of looking after a truck load of small baggage. How long do this people propose to permit this recruiting for the hosts of polygamy to go on? GAZA.

SCIENTIFIC NOTES.

The volume of power comprised in Niagara falls, exclusive of the velocity with which the water reaches the brink, is calculated to be 5,000,000 horse-power, or nearly one-fourth the entire steam power known.

The *Medical Journal* states that a few handfuls of common salt thrown daily into closets, and an occasional handful into wash-basins, goes far toward counteracting the noxious effects of the omnipresent sewer gas.

"The Monk," a well-known landmark of the Faroe Isles, five miles south of Sumbo, has disappeared. It was nearly 100 feet high, and it bore on its top several large bowlders. Part of this curious rock had fallen last year, but it was not until recently that its entire disappearance was announced.

Ellis Lever, of Bowdon, Cheshire, England, has offered a prize of $500 for the invention or discovery of a new method or composition for treating canvas or other material used as brattice cloth and air-tubing in mines, which shall, at a moderate cost, render such material air-damp and fireproof, and superior to that at present in use.

Professor S. A. Forbes ascribes the cause of the excessive mortality which lately prevailed among the perch and other fish of Lake Mendota, Wisconsin, to a minute spherical microbe which destroys the cells of the liver and the kidneys. He also says that there are various species of this germ, the different varieties of which produce specific diseases.

A remnant of the great forests which once covered the south of Sweden was recently dug out of a bog at Kinneved, consisting of a boat six feet in diameter hollowed out of a log. The tree from which the boat was formed must have been at least twenty feet in circumference. The wood, which was very hard, had assumed a blue color. The boat was so heavy that two bullocks could not draw it.

From a recent statement it appears that the cost of restoring and completing the great cathedral of Cologne from 1823, when the work was resumed after a neglect of nearly three-quarters of a century, down to April 1st of the present year was 21,000,000 marks, exclusive of objects for the services or for decorative purposes and of a large number of private donations. Work of this kind is perhaps the best means the student of history possesses for ascertaining with some degree of precision the quantity and quality of the religious sentiment prevailing within a given area over a definite period.

SEED DISTRIBUTION.

FURNISHED FROM THE STATE EXPERIMENTAL FARM.

New Varieties of Forage Plants—Barley, Wheat, Rye, Etc.—Bulletin No. 47.

The character of the season just passed prevented a fair test of the seeds sent out last year. As some of the varieties distributed last year have shown such excellent qualities on the University experiment grounds, and in the hands of a number of our correspondents, we have decided to offer many of them again this year, hoping that a more liberal rainfall will give all an opportunity to determine their value in the different regions. We have also added to the list several new growths which promise well. As has been stated in previous announcements, this distribution is made for the purpose of ascertaining the adaptation and practical value of the several kinds, in the different climates and soils of the State; and persons receiving them are requested to report results, whether success or failure, and if the latter, from what apparent causes.

As there is no appropriation available to meet the expenses of packing and postage, applicants for the seeds are requested to send the amounts specified in connection with each description below. If they desire seeds sent by express, applicants need not send money with their orders. Applications may be made for one or more kinds of seeds. In case any kind of seed becomes exhausted, the money sent will be returned unless a second choice is mentioned by the sender. Amounts less than $1 may be sent in postage stamps if convenient; larger sums should be by postal note payable at the Berkeley Postoffice. A distribution of plants and scions will be announced hereafter.

BARLEY.

The following barleys and wheats will be forwarded by mail to applicants who send 20 cents for one-pound sacks and 36 cents for two-pound sacks:

Six-rowed Barley—A very different type from that commonly grown on this coast, and we believe that for some localities and uses it is much to be preferred. The arrangement of the grains in the head is such as to show six distinct rows, instead of the crowded appearance, which makes our common barley pass as four-rowed. The straw is of only moderate length, strong and very erect, making it less liable to lodge than most other varieties. The heavy rains of June, 1884, which prostrated nearly all the other grains on our grounds, did not effect this variety. It stood erect and strong. The yield is among the highest that we have recorded in our experiments. Our stock was raised from seed secured in the Brenner collection, imported from Europe, where the grain is also particularly valued for mountain lands. We commend this grain for a general trial, and in particular for the northern valleys of the State.

Rice, Sprat, or Battledore Barley—In some respects there is a close resemblance between this variety and the last, as in its upright straw, heads of even hight and spreading beards. Straw very short, and like the six-rowed, did not lodge. It has two rows of grain in a very short head, so that the beards stand in the form of a battledore. The grain is said to swell when cooked, as rice does. The yield is fair, and the hardy plant adapted to mountain regions—an interesting variety.

Scotch Two-rowed Barley—In a series of years this has proved to be a very superior grain, both in yield and quality, as well as in not lodging as badly as Chevalier. We have good reports from seed sent out in former years.

Imperial Two-rowed—Good, but not as well proved as some others.

WHEAT.

Whittington wheat—A favorite in England, and promising well here, when sown early; though, on our soil, becoming more starchy than the original seed imported by the University. Seed, long, and resembling the white Australian; should be tried on various soils. The Whittington, grown on the University grounds, has been pronounced a good flouring wheat by a competent miller. It is the best yielding wheat we have grown.

Black-bearded Centennial—From seed received some years ago by the United States Department of Agriculture. A variety that has been widely disseminated and much praised. Its very tall and strong straw, large heads and long beard, which is black during growth, make a very showy crop. The beards are shed when the grain matures. It has been especially commended by California millers. The yield is good.

California Spring Wheat—Received from Germany under this name, but not yet identified with any variety generally known here. It seems adapted to our climate. Head of medium length, compact, beardless, with white chaff. The grain looks well, is round, rather small, soft, starchy and fairly even in size.

White Silesian Spelt-Wheat—In the chaff. This type of wheat is prized in Europe for pastry, although the chaff must be removed by a process similar to that employed with rice, and therefore is less desirable than wheat for a bread grain. With us it has never made really plump grain, perhaps because of late planting, as it apparently needs a longer growing season, as regards moisture, or a mountain climate—its preferred location in Europe. Our own experience, and that of others, indicates that its hardiness and leafy growth would make it valuable as a hay crop in the mountain regions of the State. It is sown in the chaff. Spelts succeed on poorer and rougher land, and are hardier than wheat. The grain cannot be plucked by birds. We have but a moderate supply, and can send in one-pound sacks, 20 cents each.

RYE.

St. John's Day Rye—Heavy, drooping heads; bread near the stem and tapering toward the tip. Abundant fine beards. Acknowledged to be one of the best of known ryes. From seed imported from Erfurt, Germany. For one-pound sacks, send 20 cents.

Swedish Sand Rye—Another good variety, imported from the same place and recommended for sandy soils. We would like to have this variety tried on light soils for dairy feed as well as grain. For one-pound sacks, send 20 cents.

FORAGE PLANTS.

Seeds of the three following grasses will be sent in four-ounce packages; send five cents in stamps for each:

Schrader's Brome Grass (*Bromus Schraderii* or *unioloides*)—Valued in Australia as resisting drought, and in Texas as giving good feed in winter and early spring. We have received reports from those in this State to whom we sent seeds two years ago, declaring the grass a success. It is among the first grasses to start, grows vigorously, and matures an abundance of heavy seeds almost like oats. Its seed stems being two or three feet high, and leafy, it can be used for either hay or pasture.

Hungarian Brome Grass (*Bromus inermis*)—From seed imported by the University from Europe, commended by the French, as adapted to dry soils. Our experience indicates that it will do well here, either without or with modern irrigation.

Milium Multiflorum—A perennial millet grass, growing about two feet high, with seed stems two feet higher. It is a plant of slow development, but strong. Owing to the fineness of the seed, it should be planted very carefully and covered lightly. It should not be pastured the first year, as it is easily pulled up by the roots. After being well established, if grazed down, there is an abundant growth of fine leaves, which resist winter frosts to a remarkable degree. We have had favorable reports from the plants from different parts of the State, although some experimenters have complained of its failure. This is perhaps owing to the fact that it is hard to start, and because the season was unfavorable.

Black Medic or yellow trefoil (*Medicago lupulina*)—A clover-like plant of very dense growth—very much like burr clover. It has grown on our experimental grounds without water; reseeds itself freely; adapted to moist, rich, clayey soils, where it will make a fine pasture. It can be sown like alfalfa. For two-ounce package send two cents.

Snail Clover (*Medicago turbinata*) from southwestern Spain—An annual, closely-related to burr clover, but the spirally-twisted pod is free from spines, and will not cling to the fleece of sheep. It starts with the first heavy rains and makes a dense, low mat of foliage. At maturity the ground becomes thickly covered with nutritious globular pods. For two-ounce package send two cents.

Tagasaste (*Cytisus proliferus albus*)—A species of broom; a bush-like plant, recommended by the American Consul at the Azores Islands as a valuable forage plant for dry hill lands. We have very little seed, and it will be sent to those who desire to make a careful test of the plant. To facilitate germination hot water should be poured upon the seed and allowed to stand for twelve hours before planting.

Evergreen Millet.—This is the popular name for *Sorghum halapense*. It is an unfortunate name because the plant is not evergreen, nor is it a millet. We have received conflicting reports concerning the value of this plant. It must be understood that it will not flourish on a poor, shallow soil, nor excessively heavy or stony soils, nor will it generally do much the first year. It is always late in starting in the spring, and is cut down by the first severe frost. In favorable situations it makes a very heavy growth during the summer. It should not be planted where it is not desired to remain, as it is hard to eradicate, and will spread to adjoining orchards or vineyards, especially in light moist soils. Pound packages of root stocks, 20 cents each. For planting, cut the roots, two eyes to a piece, plow a light furrow and cover in.

BLACK WATTLE.

Acacia decurrens, the black wattle, or tan bark acacia of Australia—The bark of this tree, as grown on the University grounds, contains, as heretofore stated (Bulletin No. 4), over 40 per cent. of tannin when in the air-dried condition, while that of the oaks usually amounts to only 10 or 12. The tree is a rapid grower, and is usually stripped in its eighth to tenth year, when thirty to forty feet high. Does well on heavy as well as on light soils, provided they are deep; is doubtless hardy from Sacramento southward, possibly farther north on light soils. The seed is very hard, and should be soaked well in warm water until softened, before sowing, otherwise it may be in the ground a year before coming up. As the wattles do not bear transplanting, the seed should be sown in pots or boxes and removed to open ground, with a ball of earth attached, when quite small—say six to eight inches in hight. The trees may be successfully started in open ground by planting the seed in hills about ten feet apart, covering it not more than half an inch deep with well pulverized soil. When the plants grow all but two or three of the most vigorous ones in each hill can be removed. For further information see report of College of Agriculture for 1882, subject "Tanning Plants." The seed will be sent in two-ounce packages for four cents. A few parties in suitable localities may be supplied with larger quantities for tests on a larger scale.

INSECT POWDER PLANTS.

Pyrethrum cinerariæfolium and *P. roseum*, the Dalmatian and Persian insect powder plants—The former is the one most to be recommended as an insecticide, while the latter is quite ornamental, having flowers resembling single chrysanthemums, of four or five different colors. The seed should be sown in boxes in light, porous soil, and kept shaded, but in a warm place and moist. Under favorable circumstances the seed will germinate in two or three weeks, and the plants, when of sufficient size to be handled, should be set out like cabbage plants. We can furnish the seed in one-ounce packages, two cents. For a full discussion of these plants see Report of College of Agriculture for 1882. All applications should be addressed to

E. W. HILGARD, Berkeley, Cal.

THE DECORATIVE MANIA.

Put away the little coal-hod that our darling wants to paint,
For she fain would decorate it with devices queer and quaint.
Hide the dish-pan and the wash-tubs, and likewise the garden hose,
Or Matilda will adorn them with the lily and the rose.

When our Bridget in the morning gets the wooden chopping bowl!
To concoct the morning corned-beef hash it vexes of her soul,
To uphold a wreath of pansies where she most must cut and slash,
So she scrapes it off because the paint might permeate the hash.

On the household rolling-pin is tied a pretty yellow bow,
And its lilies of the valley oft commingle with the dough,
While the new potato-masher and the kitchen pans and pots
Are magnificent with butterflies and sweet forget-me-knots.

All our articles of furniture, the ancient and the new,
Are resplendent quite with drapery and bows of brightest hue.
In the house we look about with mingled sorrow and amaze,
For Matilda is afflicted with the decorative craze.

—[Chicago Rambler.

It is given as a remarkable fact connected with deep mining than from the hours of 12 at night till 3 in the morning the disturbing influences in the bowels of the earth obtain increased activity. At this time it is observed by miners that water falls from places where none is observable during the day. The volume in the water-wheel is perceptibly increased, the atmosphere is charged with gases, which often prevent the lights from burning, and small particles of earth and rock are observed to fall from the tops of the drivers.

ANGOSTURA BITTERS are the best remedy for removing indigestion and all diseases originating from the digestive organs. Beware of counterfeits. Ask your grocer or druggist for the genuine article, manufactured by Dr. J. G. B. Siegert & Sons.

TUTT'S PILLS

25 YEARS IN USE.

The Greatest Medical Triumph of the Age!

SYMPTOMS OF A TORPID LIVER.

Loss of appetite, Bowels costive, Pain in the head, with a dull sensation in the back part, Pain under the shoulder-blade, Fullness after eating, with a disinclination to exertion of body or mind, Irritability of temper, Low spirits, with a feeling of having neglected some duty, Weariness, Dizziness, Fluttering at the Heart, Dots before the eyes, Headache over the right eye, Restlessness, with fitful dreams, Highly colored Urine, and

CONSTIPATION.

TUTT'S PILLS are especially adapted to such cases, one dose effects such a change of feeling as to astonish the sufferer. They Increase the Appetite, and cause the body to Take on Flesh, thus the system is nourished, and by their Tonic Action on the Digestive Organs, Regular Stools are produced. Price 25c. 44 Murray St., N.Y.

TUTT'S HAIR DYE.

GRAY HAIR OR WHISKERS changed to a GLOSSY BLACK by a single application of this DYE. It imparts a natural color, acts instantaneously. Sold by Druggists, or sent by express on receipt of $1.
Office, 44 Murray St., New York.

PENNYROYAL PILLS

"CHICHESTER'S ENGLISH."
The Original and Only Genuine.
Safe and always Reliable. Beware of worthless Imitations. Indispensable to LADIES. Ask your Druggist for "Chichester's English" and take no other, or inclose 4c. (stamps) to us for particulars in letter by return mail. NAME PAPER. Chichester Chemical Co., 2613 Madison Square, Philada., Pa.
Sold by Druggists everywhere. Ask for "Chichester's English" Pennyroyal Pills. Take no other.
n5-1yTuThSdw1y

Many a Lady

is beautiful, all but her skin; and n