NEW YORK ART SCHOOLS.

Art Development in America—A Glance at the Different Schools Here—The Policy Pursued by the Managers—New Ideas and New Features of Instruction.

The last half a century has witnessed a marvellous development of art in America. More serious study, travel, and culture have developed public taste to a higher demand for creative perfection, technical ability, and truer originality. On every hand the people are calling for American sentiment and designs, industries are awaking to supply the market with the artistic products demanded by a deeper and wider civilization, and as a result of all this art schools are crowded with serious and earnest students, not seeking art knowledge in consequence of a social whim for its study, or as an accomplishment or pastime, but to meet the exigencies of practical every-day living and to express the inspiration of genius in strong and worthy results.

Previous to 1802 no special effort was made to establish art in the city, but in that year the idea of a New York Academy of Fine Arts was first evolved, which in 1808 culminated in one being chartered under the name of the American Academy of Arts, with Robert R. Livingston, President; John Trumbull, Vice-President, and De Witt Clinton, Secretary. Mr. Trumbull was the only artist among the managers, and the first exhibition was held in an old circus building in Greenwich street. It was a joint stock association composed of laymen, prominent citizens, connoisseurs, and patrons of art, in whose management artists had no voice, and by whom little consideration was paid to their interests. They became exasperated with its rudeness to them when they attempted to avail themselves of the privilege of study at the studios of the Academy, with no fire and the doors opening at the convenience and discretion of the janitor, and one frosty morning the knights of the brush with Morse at their head turned their backs on it forever and organized themselves into a so-called "Drawing Association." Efforts at reconciliation with the alma mater were unavailing, and finally the new society organized itself into an association incorporated in 1828 as the Academy of Design, and elected twenty-five of their members to constitute the Academy. The association, which is owned and controlled by artists only, is a private association devoted to public service in the promotion of art both by means of its annual exhibitions of the original works of living artists and by the work of its school, which was in operation before the formal organization, is devoted to the cultivation of the arts of design, and has been maintained, with rare exceptions, through half a century.

The course of instruction is free after the payment of an entrance fee of $10, and admission is determined by competitive examination at the beginning of the year. Students sever their connection with the institution at the end of the season and must submit to the examination for readmittance. About 250 students may be received, and are at present enjoying the advantages provided, and the school is maintained at a cost of $18,000 a year. There are no elementary classes, no teachers to finish and retouch the work of students, the instruction being given entirely by criticism and lecture. Applicants for admission submit to the School Committee a shaded drawing from a plaster cast of some portion of the human figure, and promotions to the life classes, where drawings from the nude models are made, depends upon the committee's approval of a submitted drawing of the full-length statue. In the lists of students may be found the names of many of the most eminent artists of America, and the instructors comprise professors of high attainment and wide experience, among whom are Edgard M. Ward, N. A., L. E. Wilmarth, N. A., and Frederick Dielman, N. A.

The classes of the "Woman's Art School," founded through the munificence of Peter Cooper in 1859, are making constant progress in usefulness, as is indicated by their occupation of one entire floor of Cooper Union, and their overflow into parts of the building not designed for their accommodation, which is necessitated by their increased size. Though the number limit is 250, there were 310 pupils instructed during the past year, and the work done, while clever in the non-professional classes, showed evidences of marked talent here and there among the students in the special courses. In response to an invitation from the New York Educational Committee of the Paris Exposition, engravings, designs, photographs and studies in oil were sent from this school which is perhaps the largest in the world for women, to be compared with the work of the art schools in Europe.

Applicants for admission must be not less than 16 or more than 35 years of age, and so situated that self support is a necessity, and applications must be made early in the spring for admittance to the October term.

It is a regulation of the institution that application for place must be made each season whether a new or old student wishes to enter, but women who have studied during the three terms of a single year have preference for place over those who are just entering. Among the faculty appear the names of J. Alden Weir, N. A.; R. Swain Gifford, N. A., and George De Forrest Brush, S. B. A.

The Art Students' League accommodates between 600 and 700 students, and its books show an increase in membership over that of last year. This is the most unique organization in the city, composed entirely of and maintained and controlled by the art students themselves. It has no salaried officers, but is managed entirely by a Board of Control, consisting of twelve members, many of whom are actual workers in the classes, with Mr. Horace Bradley as Director and Mr. E. D. French, President. As an organization the League admits to membership artists and students intending to make art a profession, who have worked three months in the life classes and are considered eligible to membership by the Board of Control and other members. The school is under the patronage of no wealthy lover of art and receives no contributions of money for its support, but the necessary expenses are divided among the students. Students entering the preparatory classes are admitted with no examination, but entrance to the life classes is secured by the submission of drawings in the usual way. Among its instructors for the year are Kenyon Coxe, George De Forrest Brush, Augustus St. Gaudens, William M. Chase, J. Carrol Beckwith, B. R. Fitz, and others equally well known and deservedly popular artists. The site for the handsome new building in which the League will make its future home and give perpetuity to its work has already been selected on Forty-third street, near Fifth avenue, and the purchase will be effected in a few days. The design for the building will be chosen by competitive examination from models submitted by the Architectural League, and the structure will be appropriate and substantial as well as imposing. The work of the students was hung well in the Academy exhibition, and the outlook for the school seems to be altogether most encouraging and promising.

The youngest of all schools for the serious study of art is the N. Y. Institute for Artist Artisans in Twenty-third street, organized by Mr. J. Ward Swimson, a graduate of Yale and the Paris Beaux Arts, formerly in charge of the Metropolitan Art Schools, in accordance with an invitation extended to him on his resignation from that school by Tiffany & Co., Richard Watson Gilder, Candace Wheeler of Associated Artists, Charles Church Turner, and others. Among the shareholders are Tiffany & Co., Cottier & Co., the Whiting and the Gorham companies, Carter, Sloane & Co., Devoe & Co., Mr. Calvert Vaux, Herter & Co., and Mr. Cheny, the silk manufacturer of Paterson. This institute was called into existence by a popular movement to protest against the policy of the management of the Central Park institution, and in its [illegible] years of its existence has doubled its number of classes and largely increased its membership. Support comes from two sources, the students and the manufacturers of certain lines of art goods. The distinguishing feature of the instruction is interpretation, not imitation, and the methods employed are characteristic and unlike those of other institutions. First, the study of the abstract and inorganic forms of beauty; next, how nature has utilized these forms in organic life; and, lastly, the application of these forms to ornamental decoration and design. The range of the curriculum has been extended gradually from some small beginnings until it now covers all branches of study in arts calculated to dignify, ennoble, and make beautiful the daily labor of the artist artisan.

The art schools of the Metropolitan Museum of Art have been, during the past year, removed to large and beautifully appointed rooms at the Museum in Central Park, and the classes are rapidly increasing in numbers, 250 being their limit of membership. Among the instructors are Mr. R. Cleveland Coxe, Mr. H. Siddons Mowbray, Mr. Arthur L. Tuckerman, Mr. J. Q. A. Ward, and others, and the work of the students is greatly facilitated by the provision of superior art material and furniture and the privilege of visiting the Museum free of expense. Instruction is not free in this school, consequently the conditions of membership are less exacting than those of the Academy, the only requisites being a letter of introduction from some resident of good standing and specimens of students' work from which to determine their proficiency.

A CHANCE FOR MARINE INVENTORS.

Something Ought to be Done to Save the Big Four-masted Schooners.

The loss of the Millie G. Brown, the largest and handsomest schooner that ever sailed out of Boston, the story of which was told in THE SUN a few days ago, calls attention to the urgent need of an improved rig for sailing ships of large capacity and light draught. Perhaps it had better be said that it emphasizes the necessity for an improved rig, for the Brown was not the first of these ships to get dismasted in a gale of wind that was by no means extraordinary in its force.

Here was a schooner that registered nearly 1,600 tons, and was capable of carrying as much cargo as the great Yankee clipper ship built during the fifties could do. She had four masts, and what is called the fore-and-aft rig. Every one likely to try a hand at inventing a new rig for these vessels knows what that is. Each mast was composed of two timbers, a topmast and a lower mast. These timbers were so long that they towered up as high as the masts of a full-rigged ship of like capacity. And yet, instead of the crew of a full-rigged ship—say thirty men—this schooner probably carried ten or twelve, all told. The schooner rig ordinarily needs less men to handle it than the square rig of the ship. A steam winch hoists the huge sails for the crew, and they are lowered away of their own weight. If sheets must be hauled aft the schooner can be luffed. Two men can usually tie up a topsail, and all hands can manage to take reefs in the big lower sails one at a time.

It is not that the canvas cannot be taken off a schooner when the gale arises. The trouble is that the canvas that is left on her is not placed right to save the vessel.

As the wind increases the topsails and lighter jibs are furled, but it must blow a living gale before the Captain will take reefs in the lower sails. First of all he is likely to take in the spanker, or the extreme after sail. If she shows a tendency to fall off in the trough of the sea he reefs down the foresail. Last of all comes down the main. He will only do this to save her masts, and he is not sure to save them even then. The trouble is that when these big sails are reefed the spread of canvas is so near the deck that the wind fails to reach it as the vessel sinks behind a wave. But a moment later, as she rises on another wave, the wind comes booming along and strikes those reefed sails such tremendous blows as to take the masts right over the rail.

Should the wind fail to do that, the waves breaking over the vessel fill the low-down bagging canvas full of the solid water, and then the masts are doomed; for the masts are tall, and the angle of the shrouds too small to support them properly. In the case of the Millie Brown, the wind broke loose the fastenings of her deck load of lumber and sent the boards flying through the foresail, tearing it to shreds. But that is not all. When the vessel sinks down behind a wave, and the wind no longer presses against her sails, there is nothing to keep her headed up to the wind, and the sea shoves her around until she lies like a log in a ditch, and a mighty ditch at that, from which she will be tossed in no time, only to be dropped sideways into another, while the strain on the huge levers which her masts are is something awful to contemplate.

The master of the steamer Duchess, in a letter to the Herald some time ago, said he had observed that at forty years of age the masters of three-masted schooners showed "hard-lined, parchment-looking faces, deeply scored with anxiety and dread." If the Captain of a three-master is affected thus, what must be the mental condition of the Captain of a four-master when the gale comes on?

In a square-rigged ship the maintopsail is the last sail left abroad to the gale. It is high above deck, and it saves the ship if hove to. If she tries to scud, the square foresail is set, and that lifts her along over the waves, while a fore-and-aft foresail serves only to depress the vessel's bow.

If some bright inventor can devise a means for brailing a fore-and-aft sail into the mast instead of hauling it down to the deck, he will help the rig materially; for what is needed is a sail of some sort that can be set aft when the other canvas below is furled. The big schooners are here to stay in spite of the danger of wrecking, for unless wrecked they pay better dividends than anything afloat.

BETTER PAY WITH THE CHEVRONS.

Sergeants and Corporals Sometimes Earn Less Than the Men They Command.

WASHINGTON, Jan. 11.—There is a call in the army for a higher scale of pay for non-commissioned officers, and, accordingly, Mr. Harmer has introduced a bill which provides that a regimental sergeant major shall hereafter receive $75 per month; a regimental quartermaster sergeant, $60; the chief musician, $100; a principal musician, $60; a first sergeant, $60; a sergeant, $[illegible]5; a corporal, $30; each also having the service increase now provided by law.

That is going at once to a great extreme. Adjt.-Gen. Kelton's more moderate schedule is $36 for the sergeant major, $34 for the quartermaster sergeant, $30 for the chief trumpeter or principal musician, $26 for the saddler sergeant, $34 for the first sergeant, $25 for the sergeant, $20 for the corporal. He, however, would give $100 a month to the chief musician of the regimental band, which is the rate provided in the bill introduced last winter for the organization of such bands.

To show how great an increase in pay Gen. Kelton's proposal would secure it is enough to note that in the present pay table the corporal of the line gets but $15 monthly during his first and second years, or $2 more than the private; the sergeant, $17; the first sergeant, $22; the saddler sergeant of cavalry and the chief trumpeter of cavalry and principal musician of artillery and infantry, also $22; the sergeant major and quartermaster sergeant, $23 each; the chief musician, $60.

Gen. Kelton's schedule puts company non-commissioned officers on the same footing with their comrades of corresponding grades in the staff departments in the engineer and signal corps, and the quartermaster's, commissary, and ordnance departments. In the case of the musicians an additional reason is found for the increase in the fact that they now accept engagements outside of the army, and this brings them into competition with local civilian musicians.

It is generally considered that the company non-commissioned officers ought to have some increase of pay, partly because they have a good deal of work to do and partly because this would be an incentive to reenlist and remain in the service. But a special reason for the proposed increase in their case is furnished by the fact that under the allowance of extra duty pay the private even sometimes earns more in a month than a non-commissioned officer, who is not allowed to resort to this source of increasing his income. Several years ago Congress provided that fifty cents extra per diem should be paid to enlisted men detailed on extra duty in the quartermaster's department, as mechanics, artisans, and school teachers. As a result a first sergeant might receive $22 a month, and a soldier on extra duty, even if a recent recruit, might get $25 or $28. The question therefore comes, whether a first sergeant, who has risen to that responsible post through unusual aptitude as a soldier, coupled, perhaps, with bravery in the field, should receive less pay than a man who may be a very inexperienced soldier and a by no means remarkable painter or carpenter. The rule of the War Department that non-commissioned officers are not to be employed on extra or daily duty of a nature not consonant with their grades in the military service, is based on the endeavor to make their offices respected. Yet, to a great extent, it cuts off the possibility of earning extra duty pay. Besides, the duties and responsibilities of a non-commissioned officer should be rewarded by something more than rank without adequate pay. On this point Gen. Kelton's views are worthy of consideration:

The first sergeant of a company may truly be called the hardest worked non-commissioned officer in the army. He has a direct responsibility for the proper care and use of the arms, equipments and other property of the company; he is always on duty; must possess tact, sound judgment, superior intelligence, and have a thorough knowledge of all details, orders, and papers pertaining to company administration. A good first sergeant is indispensable to the making of a good company, for without him the best efforts of the Captain would be rendered abortive. Exercising a certain supervision over the duties performed by every member of the company, he commands and instructs men in the ranks who receive more compensation than is allowed him, his pay being $6 less than that of a soldier detailed as a mechanic, and $1.50 less than is received by the private detailed on duty as laborer. Company sergeants, who are charged with important duties in the internal economy of the company, besides commanding guards, escorts, fatigue parties, &c., receive $1.50 less than a soldier teamster in the Quartermaster's department, while a private on extra duty receives $8.50 more than the pay of a corporal.

The class of non-commissioned officers in the army occupies the intermediate grade between the private and the commissioned officer, and its duties demand men of good capacity, strict honesty, untiring energy, and possessing high soldierly attributes. Justice to company non-commissioned officers demands that their pay should assimilate to that allowed similar grades in other branches of the service.

The extra duty pay is all right, because if a man enlists as a soldier and finds that he is needed also as a laborer, he is entitled to some compensation for this change of expected employment. The rifle is the military implement, and if he is called upon to wield instead the paint brush or the saw, he may conclude that it is as well to do this in civil life, where he will have wages suited to the work. This point being fixed, it seems only fair that these company non-commissioned officers, who can derive few or no extra earnings from that source, should be indemnified by greater regular pay.

POEMS WORTH READING.

Across the Bloody Chasm.

From the Century.

I was fer Union, yes, agin it.
'Pearsliks, to me, each side was winner,
Lookin' at Now and all 'at 's in it.
Le' 's go to dinner.

Le' 's kind o' jes set down together
And do some pardnership forgittin';
Talk, say, fer instance, 'bout the weather,
Er somepin fittin'.

The War, you know, 's all done and ended,
And ain't changed no p'ints o' the compass;
Both North and South the health 's jes splendid
As 'fore the rumpus.

The old farms and the old plantations
Still occupies the'r old positions.
Le' 's git back to old situations
And old ambitions.

Le' 's let up on this blame' infernal
Tongue lashin' and lap jacket vannin',
And git back home to the eternal
Ca'm we're a wantin'.

Peace kind o' sort o' suits my diet,
When women does my cookin' fer me,
Ther' wasn't overly much pie eat
Durin' the Army.

JAMES WHITCOMB RILEY.

All They Know.

From the Buffalo Courier.

Where lies the land to which the ship would go?
Far, far ahead, is all her seamen know;
And where the land she travels from? Away,
Far, far behind, is all that they can say.

On sunny noons upon the deck's smooth face,
Linked arm in arm, how pleasant here to pace;
Or o'er the stern reclining, watch below
The foaming wake far widening as we go.

On stormy nights, when wild northwesters rave,
How proud a thing to fight with wind and wave!
The dripping sailor on the reeling mast
Exults to bear, and scorns to wish it past.

Where lies the land to which the ship would go?
Far, far ahead, is all her seamen know;
And where the land she travels from? Away,
Far, far behind, is all that they can say.

ARTHUR HUGH CLOUGH.

The Moan of a Doubtful Conscience.

From the Overland Monthly.

Father of light, if we could only know
In surety that the little good we do
Served in its way to help some other soul,
And that our piteous habit here below
Of hoping what our aching hearts want true,
Would some time bring us to the longed-for goal:
Then would our way seem hopeful, clear, and sweet,
And we should journey on with willing feet.

Is it so much, this guerdon that we ask?
Now fear as heavy as new-broken wings
Hangs on us, lest we do unconscious wrong;
But if upon us groping at our tasks
Came the clear light that this assurance brings,
There would be comfort for us sweet as song,
And radiance, and the breath of peace be there,
Like soft leaf-whisperings echoing everywhere.

FRANCIS E. SHELDON.

They All Have It.

From the Boston Herald.

Speak! O lovely Ann Eliza, with a terrible coryza,
And a wheezing respiration full of sighs and husky moans;
With a constant lachrymation and a nasal intonation,
From catarrhal inflammation o'er the turbinated bones!

Why, thou young and happy maiden, is thy conversation laden
With a copious addition of abortive b's and d's?
And from whence did you derive a red and swollen conjunctiva,
And a frequent inclination to incontinently sneeze?

Is this malady outrageous which you suffer with contagious,
Epidemic or endemic? Tell from whence the thing arose;
Where its place of incubation, what its future destination?
Spake the lovely Ann Eliza, smiling sweetly, "No one nose."

The Men Who Miss the Train.

From the Yankee Blade.

I loaf aroun' the deepo jest to see the Pullman scoot,
An' to see the people scamper w'en they hear the ingine toot;
But w'at makes the most impression on my som'w'at active brain,
Is the careless men who get there jest in time to miss the train.

An' some cuss the railroad comp'ny an' some loudly cuss their stars,
An' some jest gallop down the track an' try to catch the cars;
An' some with a loud laff an' joke will poultice up their pain;
Var'us kin's er people get there jest in time to miss the train.

An' there is many deepos an' flag stations 'ithout name,
Along the Grand Trunk Railroad that leads to wealth and fame,
An' men rush to these deepos as fast as they can fly,
As the Train of Opportunity jest goes a-thunderin' by.

They rush down to the stations with their hair all stood on end,
As the platform of the tail-end car goes whirlin' roun' the bend;
An' some men groan an' cry aloud, an' some conceal their pain,
W'en they find thet they have got there jest in time to miss the train.

But the cars puff through the valleys an' go a-whirlin' by,
An' float their banners of w'ite smoke like flags of victory;
They leap the flowin' rivers an' through the tunnels grope,
An' cross the Mountains of Despair to the Tableland of Hope.

The Grand Trunk Railroad of Success, it runs through every clime,
But the Cars of Opportunity they go on schedule time,
An' never are their brakes reversed: they won't back up again,
To take the men who get there just in time to miss the train.

S. W. FOSS.

On the Pleasure Arising from Ginger Cake.

From Punch.

Skylark, that dost the morning wake
In the pearly heights of dawn,
Or when its dædal splendors break
In freaks of empyrean brawn,
Be not so proud, thou canst not make,
As Chloe can, a ginger cake.

O thou fleet-footed fawn,
That through the glade dost lightly take
Thy dappled way, and scarcely shake
The dewdrops from the lawn,
Be not so proud; thou canst not make
As Chloe can, a ginger cake.

O beefen herd of browsing steak,
That sweetens all the air around,
Rich milk you give, and many a pound
Of butter, fresh as primroses;
You cannot make a ginger cake
As Chloe can, with perfect ease.

O chanticleer, who clapp'st thy wings
Before the watchful lark upsprings
And sound'st thy clarion, ere the flakes
Of the on-rushing daylight's foam
Whiten the fields where the stars roam,
Thou ken'st of many mystic things
But not a whit of ginger cakes,
Such golden-headed Chloe makes.

O nightingale, that trill'st thy pearly note
Gargle yet the Easter breeze coldly blow,
Making with tender song thy strained throat,
And eke the moonless night with raptured woe,
Though singing all the budded flower,
Yet cooking round thee is in flower,
And Chloe, proud bird, beyond the warbler's power;
Albeit, as you makes delicious cake
She hath not charmed a bower.

Not, Cake, from
The bard is fairly love of thee,
But that all Nature praise to sing,
All woodland cradle minstrelsy,
All magic of the bird foot and wing,
All that most moves long spring,
Which thrills to tokens inner love
Unite in this their psalm above,
To amber-headed Chloe's bring
Like her they pretty are ort;
Like her, they make a waiset
When winter stings or wasaf joy
In this on common ground they joy,
Yet, not transcending Nature's set—
They cannot make a ginger cake,
And Chloe can.

The Angling Annal.

From the American Angler.

An angler sat by the winter fire
While only his wife was nigh;
And he said to himself,
Did this cunning old elf,
"I'll tell 'em a whopping big lie,
A brilliant and intricate lie."

He leaned his chin on his ancient hand,
While gently he stroked his beard,
Then he he gathered his pen,
His ink bottle, and then
He slyly and knowingly leered
A leer that was foxy and weird.

He gazed aloft at the ceiling dark,
And then he looked down at the floor,
As he said, "Of a bout
After salmon and trout,
I'll give 'em some angling lore,
Some lovely and lying old lore."

He wrote and he wrote, a solid hour,
His wife all the while sitting by,
Very certain, however
That her hubby, so clever,
Was working up some novel lie—
Some wild and extravagant lie.

When sudden the old man rose up stark
With looks that were wisen and cold,
"What's the matter?" cried she;
"The deuce!" said he,
"I'm certainly fast growing old;
Every lie I can think of's been told."

The Last Cigarette.

From Drake's Magazine.

I light the night's last cigarette,
The burdened brain's release;
To thee I dedicate its fire
Its incense, and its peace.

In soft, succeeding billows
The fleecy fragrance rolls,
From which one face smiles ever,
Crowned with soft aureoles.

And on the veering vapor
The hands of Hope begin
To paint the only paradise
My weary soul would win.

Raise no forbidding spectres
Within your fleecy shroud,
But show the fateful future,
O mystical white cloud.

Show me the end of longing
The heart of her I love!
Fade not; but on yon zephyr
Be thou my carrier dove.

Tell her that when has vanished
Thy birth spark in the gloom,
Its faithful breath long lingers
About my lonely room.

So, though love's flame may smoulder,
Its spell doth not depart,
But fills with unseen censers
The chambers of my heart.

Puff! 'tis the last! the Lethe
Is drained to its final sip.
Are these Dead Sea fruit ashes
That linger upon my lip?

Is she but a phantom lonely,
Cheating my soul with bliss
That cometh in visions only,
To end in smoke, like this?

FRANK H. GASSAWAY.

WISDOM OF THE WITS.

Like the King's Clown, They Are Philosophers of the First Class.

SOME NAUTICAL JOKES.

SEA TONICS.

Young Lady (to quartermaster of the ship)—What a fine air this is to-day. Did you ever see anything to make one livelier?

Jack Servenmalet—Aye, mum, I has—a first mate with a belayin' pin, mum.

THE WAY OF THE WORLD, AFLOAT OR ASHORE.

The Tiller—I say, I'm hard up and—and——

The Ship—Humph. Is that so? Then I'm off at once.

WHEN HOPE FAILS.

The Chaplain (to sailors on a spree)—Ah, men, you are careless now, for it's fair weather. But what would you do if the clouds of adversity arose and a hurricane of sorrow burst upon you and hope failed—what would you do?

Jack Servenmalet (benignly)—Aye, sir, we'd pi (kiio) pipe to grog, sir.

JACK'S IDEA OF A GOOD PUN.

Young Lady—That's a very nice pipe you're smoking, Mr. Servenmalet.

Jack—Aye, mum, it's a reg'lar sweetener.

"I don't suppose there is any sort of a pipe a sailor likes better than a genuine 'seafoam,' is there?"

"Aye, mum, one."

"Indeed! What is it?"

"Pipe down, mum."

VARIOUS SORTS OF LEAKS IN AN OCEAN GREYHOUND.

Broken Rivet—Whoop! I'm busted, and here's a leak to sink us all.

Stoke Hole—Avast there, sonny. If I can't swamp her she needn't worry about any other kind of a leak.

The sky is gray and dark to-day,
The roads are naked, bleak, and bare;
And things are slow where'er you go,
Because the snow is in the air.
But if to-night a mantle white
Should fall and cover all around,
It's safe to bet we'd grumble yet,
Because the snow was on the ground.
—Chicago Journal.

Mine eyes have seen the coming of the woeful Russian grip.
It is going through the country on a kind of flying trip;
It is seizing all the people just above the upper lip,
And it still goes sneezing on.
—Chicago Tribune.

"Is marriage a failure?" he asked of a maid,
Who clung pretty close to his side.
"I'm sure I can't tell, sir," the young lady said,
"Until you have made me your bride!"
—Texas Siftings.

She's as beautiful as an angel,
And as amiable as she is fair,
For she always takes off her high-crowned hat
When she sits in an orchestra chair.
—Boston Courier.

Molly has her sealskin sacque
And Willie has his sled,
But dear papa's pocketbook
Is almost sick abed.
—Kearney Enterprise.

"Where are you going, my pretty maid?"
"I'm going to sneeze—atchoo," she said.
—Washington Star.

Beneath this stone lies old Bill Blain,
No more he smiles nor wrangles.
His life was always on the square,
And hence full of rye-tangles.
—Terre Haute Express.

We think on the whole that the Czar
Has just gone a little too far
In packing his grippe
For this holiday trip
With a forty-horse power catarrh.
—Boston Transcript.

In the vastness of space ethereal
Range an army of foes bacterial,
That are said to give us the grip.
'Tis too sad that a vagrant bacillus
Should be ever permitted to kill us,
With his microscopical nip.
—Buffalo Courier.

Mr. Grubbs (10 P. M.)—I hate to go to sleep, knowing that a strange young man is down in the parlor with our daughter.

Mrs. Grubbs—Don't you worry. We had onions to-night, you know.—*New York Weekly.*

Wife—What did you ever see in me to make me your wife?

Husband—Do you know I've asked myself that same thing a hundred times since we've been married.—*Epoch.*

Brown—I had my diamond pin stolen last night.

Sergeant—How can it be identified?

Brown—It had a patent thief safety chain attached.—*Epoch.*

Farmer—Why don't you go to the workhouse?

Tramp—Dey'll have ter change de name o' de institution afore dey gits me inter it.—*Lawrence American.*

Practical—"I will die for you," he exclaimed, passionately. "Will you be my wife?"

"Get your life insured before you die, and I guess it's a go," said she.—*Somerville Journal.*

Hamlet—Have you seen the new work called "The Actor's Railway Guide?"

Gimlet—I have not. What is it?

Hamlet—Just the ordinary telegraph poles.—*Boston Herald.*

Hotel Clerk—Check your grip, sir?

Guest (with the influenza)—Good Lord, yes; can you do it?—*Kearney Enterprise.*

Mrs. Jobs—What on earth is that?

Mr. Jobs—This, my dear, is a barometer—a present from our son at college.

"Oh, I've heard of them. Isn't the dear boy thoughtful! Which way do we screw it when we want the weather to be fine?"—*New York Weekly.*

Mr. Crook (to chum)—So you've been getting married to Maria during my absence? Who was best man?

Woful husband—Maria.—*Pick Me Up.*

Blossom—Do you believe in minding the baby?

Henpeck—In believe in minding my wife.—*Epoch.*

Bill—Where's Tom now?

Jack—Oh, on the stage.

Bill—Developed talents, eh?

Jack—Yes, drives a four-in-hand now.—*Binghamton Republican.*

Gentleman—You got 50 cents from me yesterday, and here you are again to-day.

Beggar—Of course: what guarantee have I got that one of us may not die before to-morrow?—*Texas Siftings.*

Dead embers of 1889—September, November, December.—*Boston Herald.*

Old Lawyer—I cannot take your case. Circumstantial evidence is so strong against you that it will be impossible to prove your innocence.

Prisoner—But I am not innocent. I am guilty.

"Oh! Then maybe I can clear you."—*New York Weekly.*

Brightfellow—Make any calls New Year's Day, old boy?

Stoopid—Yes, called on Miss Goldbug.

"Did she say it was a go?"

"No, but her father said so."—*Lowell Mail.*

When a woman loves a man she goes the whole hog, even to the wart on his nose. It isn't so with man.—*Philadelphia Inquirer.*

Benevolent Person (to tramp)—What do you usually do in the winter time?

Tramp—Wait for summer.

Benevolent Person—And what do you do when summer comes?

Tramp (resignedly)—Begin to wait for winter.—*Drake's Magazine.*

Lucy (aged 11, who is reading a paper)—It is perfectly dreadful!

Father—What's dreadful, Lucy?

Lucy—Another faithless wife, the mother of six children, runs off with a married man, who leaves a large family behind. Dear me, if this don't stop pretty soon there will not be any parents left.—*Texas Siftings.*

"What is sweeter than to have a friend you can trust?" asked Sawkins.

"To have a friend who will trust you," replied Dawkins.—*Hartford Times.*

Belinda—Dearest, what was the real reason of your marrying me?

Alphonso—I think it was because I understood you. And what was the reason of your marrying me?

Belinda—I think it was because I did not understand you.—*America.*

Tu—What has old Boggs done with his two daughters?

Ned—He put the good one on the stage and sent the bad one to the convent.—*Epoch.*

Minnie—I wonder who was the young man in the fur-trimmed coat and silk hat that we just passed?

Mamie—Oh, he is a Chicago travelling man.

Minnie—Then you know him, do you?

Mamie—Me? No. But didn't you hear him say "I have saw"?—*Terre Haute Express.*

Foreign Prince (haughtily)—It may as well be understood, Miss Millions, that I am no beggar. If I am to be your husband I cannot accept as an annual allowance for my expenses any sum inconsistent with the dignity of my rank and position in life.

American Heiress (affectionately, but business-like)—I will allow you, my dear Prince, enough to pay your club dues and keep you in clothing, canes, and cigarettes.

Foreign Prince (grinding his teeth)—I'll take it.—*Chicago Tribune.*

An ingenious Western man has made a musical instrument from a corncob. Any one can play by ear on it.—*Yonkers Statesman.*

Head of Firm—Mr. Travers, while you were at lunch your tailor called to collect a bill. I am surprised and pained, sir, to learn that you are in arrears. Isn't it possible for you to live on your salary?

Travers—Certainly it is, sir; but you don't expect me to support my creditors, too?—*Clothier and Furnisher.*

In Little Africa, a district on the west side, there's a high-toned club, one of the practices of which is to whiteball unpopular candidates.—*Puck.*

A time-honored adage declares—
"A rolling stone gathers no moss;"
Then change is attended with loss,
And worn by the friction of cares.

But just as you fasten on that,
Another old proverb is found
To assert with conviction profound,
"A setting hen never grows fat."
—Detroit Free Press.

Snow, snow, beautiful snow,
If you would come the grip might go.
—Utica Herald.

O sad is the lot of him who sits
By the firelight's dying flame,
And thinks, and thinks, and thinks, and thinks
Of the presents that never came.
—Chicago Tribune.

THE "EQUINE PARADOX."

Further Expert Calculations on the Problem of the Two-minute Trotter.

TO THE EDITOR OF THE SUN—*Sir:* In THE SUN of last Monday an editorial appeared under the above caption, the apparent absurdity being in the statement that while trotting horses can go a mile eight seconds slower than their rate for a quarter, thoroughbreds fall off more than twelve seconds. In your own words:

As we have said, the trotter of to-day, whose blood is still almost half "cold," can sustain for a mile a speed less by about two seconds only to the quarter than it is capable of showing, when pressed to an extreme spurt. But with the purple blooded thoroughbred runner the difference is more than three seconds. The record for a quarter under the saddle is 21¼, yet the fastest mile ever run was at the rate of 25 seconds lacking a sixteenth, to the quarter. Let the observers of questions concerning the horse study that apparent paradox and see what they make of it.

It does not require a great deal of study to explain the seeming anomaly. A fast gallop is more trying to the lungs and muscles than a fast trot, and the basis of your calculation is the time for a quarter of a mile, 21¼ seconds, made by "Belle, age and weight unknown, Galveston, Texas, July 3, 1880," and the mile of Ten Broeck and Stuyvesant, 1:39¾. In all probability neither Ten Broeck nor Stuyvesant could run a quarter faster than 23 seconds, and it is just as probable that Belle could not make a mile in 1:45. I have timed hundreds of quarters in races, and when race horses were running trials, or given a "brush" for a quarter of a mile, and also very many of the fastest short horses, and have never made it faster than 23 seconds. Unquestionably others have been more fortunate, but trainers agree that when a horse has the speed to show that fast, the grand essential of a race horse is there.

When the fastest trotting record was 2:17¾, I saw a horse haul a wagon through the stretch in 31 seconds, and, so long ago as in 1879, witnessed St. Julien make the last quarter of a mile in 30¾ seconds, the time of the mile being 2:18¾. The increased rate for the longer distance has been accomplished not so much from gain in short flights of speed as in an increased ability to "carry the clip." That this has been mainly owing to a "further infusion of thoroughbred blood in the trotter" is susceptible of the clearest proof. Maud S., Jay Eye-See, and Sunol—first, second, and third on the list—are in the same relation to the "royal purple" through their grandams. Maud S. has gone a quarter in 30 seconds, and her mile in 2:08¾ has held the first place for over four years. St. Julien, not so near to the thoroughbred, with a quarter in 30¼ seconds, is credited with 2:11¼. It is claimed that Guy has more speed than any of them, and though the sire of his dam had a good deal of thoroughbred blood, his erratic grandson has too much of the cold fluid to "live the pace" in accordance with his rate for a short distance. Palo Alto is from a thoroughbred dam, and his trainer, Charles Marvin, informed Mr. Bonner that the fastest quarter he ever trotted was 31¼ seconds. His record of 2:12¼ shows a drop of 1.31 seconds per quarter from his greatest rate. There are numerous horses of trotting lineage, without near crosses of thoroughbred, which can go a quarter in from 32 to 33 seconds which are unable to make a mile in 2:20, and some of them are troubled to "get in the list."

But the paradox is the main thing to elucidate, and though the comparative rate of trotters without near strains of racing blood, and those which are nearly allied to the thoroughbreds has a bearing, the difference between a runner's quarter of a mile in 23 seconds, and that of the trotter which is seven seconds slower, is more to the point.

A stride of 18 feet in a fast trotter has about the same relation to that gait as 23 feet for a fast galloper. The trotter which goes a quarter in 30 seconds covers 44 feet in a second, the runner 57.39 feet in the same time at a 23-second gait. There are two air flights in the stride of a trotter, one in the galloper. The strain on the muscles to hurl the runner and rider is immense, and that power is exerted with one limb at a time. The action in the flying gallop can be expressed as 1, 2, 3, 4—air flight. One represents a hind foot touching the ground; two, the next hind foot; three, a fore foot, and four, the fore foot which gives the final impulse to throw the body through the air. Fast trotting action is like 1, 2: 1, 2, there being in a square trot a uniform cadence, the ear unable to detect the air flight which is so clearly defined in the gallop. The difference between a stride of 18 feet and one of 23 feet is not confined to ground covered when the cause for tiring is sought for. The race horse makes 60 strides in the quarter and the trotter 72¾ strides, but the longer stride only occupies .3833 of a second, while the trotter is .4138 of a second in the movements. It will be understood that these calculations are founded on 23 and 30 seconds time, and strides of 18 and 23 feet. It is not necessary to go further to exemplify this phase of the question, as it is evident that the work of the muscles is far more trying when distance overcome is increased with greater rapidity of action. The race horse makes 2.61 of the long strides in a second, the trotter 2.41 of the shorter in the same time.

There is another element which has a bearing on the comparative falling off from the rate shown on a quarter of a mile. Quarters, last quarters at least, in a great majority of cases are made on a tangent. A circle generally has to be negotiated when a mile is run. This applies to trotting as well as running, though when Sunol trotted in 2:10½, her fastest quarters, the first and third, were each 32 seconds, and in these both turns of the track were travelled.

And, by the way, the speed shown by Sunol in rounding these corners, rather militates against the position one of your correspondents occupies, that the great filly will not lower her record next year. The October rains forced a cessation of fast work, so that she was not in prime condition, and the nervousness incidental to juvenility had not been overcome, so that she slackened her pace when 150 yards from home, owing, doubtless, to the cheering of the spectators. Should January and February present as favorable weather as is frequently the case in California, Sunol will lower her mark before she is absolutely four years old. A three-year-old which can trot a circle of half a mile in circumference in 1:04, when a year older will surely trot a mile inside of 2:08, given health and condition.

Your estimate that the "two-minute trotter" will have to be capable of making a quarter in 28 seconds is within bounds when applied to the "ordinary run" of trotters. Reasoning from what has been done, the two-minute trotter will have one "strictly thoroughbred" grandparent, and that on the side of the dam, as well as the speed to trot a quarter in 28 seconds. With a horse bred like Palo Alto, viz., a thoroughbred dam with as stout crosses as Planet, Glencoe, imported Margram, Boston, American Eclipse, and other strains of the "old-fashioned hard-bottomed sort," a speed of 28.8 seconds to the quarter will be adequate. This has an arithmetical foundation, as according to the rule of three, 2:12¼ : 31¼ :: 2:00 : 28.8.

And now for conjecture. The progeny of Palo Alto and a mare capable of running a mile in 1:40 or thereabouts, possessed of a speed of 29 seconds to the quarter mile, will undoubtedly do the trick, and should that be a stallion, a grandson or great-grandson may lower the margin.

J. C. S.

OAKLAND, Dec. 29, 1889.

FORTY-FIVE MINUTES WITH A MULE.

An Instructive Period for Several Residents of the Monumental City.

From the Baltimore Sun.

The steamer Joppa was last night delayed in leaving her pier at Light street by a large bay mule, which was to be shipped to Easton Point. The animal, in company with a pair of horses, arrived at the wharf at 8:30. The driver then started to lead this stock on board the steamer. The horses passed up the gangplank without objection. Not so the mule. When near the entrance to the boat he took a few steps forward and then, as if awakening from a dream, planted all four feet in different directions and stood like a statue. This action on the part of the mule was done so quietly that few of the many persons on the wharf noticed what was going on.

The driver began to coax, then to swear, and then to whip and pull, but all to no avail. The mule stood the storm with eyes closed and tail down. Everybody on the wharf made some suggestion to the driver as to the best way to start the mule. Finally a rope was placed around the animal's tail, and when the line was in readiness the entire crew took hold of one end, by which they expected to haul the mule on board. The operation was watched by the crowd in breathless suspense, and when the word was given to "haul away" the men gave a mighty pull.

A second later and the scene had changed. Mule, rope, overalls, trucks, trunks, miscellaneous freight, men and women could be seen scattered along the wharf as if prostrated by a cyclone. A few hatless men flew in terror to the opposite side of the street. One gentleman of about 250 pounds, who had only a few seconds before impressed his hearers that he knew all about mules, and was not at all afraid of them, was found wedged in an empty barrel from which he was loudly calling for assistance. The mule was indeed master of the situation as he stood surveying the havoc he had wrought. And he had done it all by an incessant cannonade of his hind legs.

The force again collected and tried another strategical movement. They blindfolded the animal. But it was all to no purpose. The scheme wouldn't work. Time was being lost and something had to be done at once. As no further suggestions were offered by the onlookers on the wharf, Captain Wheeler ordered a large rope to put around the mule's hind legs. This was done, and with the aid of all present the mule was hauled on board. As the business end of the animal disappeared from view the crowd yelled with delight. The exact time occupied, according to Patrolman Hughes, was 45 minutes.

SCORPIONS AND CENTIPEDES.

The Results of Some Minute Observations of the North American Varieties.

From the St. Louis Republic.

The scorpion of our Southern States is seldom more than three or four inches in length and of a peculiar livid yellowish color, with a dark shade on each side of the back. Two round exceedingly bright little eyes are situated on top of the front part of the head. From each side of the front of the head extends a jointed leg or arm, terminating in a pair of pincers like that of the crawfish or lobster. The body is further provided with four pairs of painted legs. The tail is considerably longer than the body, and is composed of six sections, or joints, on the last of which is fixed the sharp, hollow sting. Two little sacks or bags in the last section furnish venom to the sting. The sting is bulbous at its attachment, but quickly contracts into a slightly curved, hard black point, perhaps an eighth of an inch in length.

The sting of the scorpion is very painful, but not necessarily fatal to mankind. I once saw a bare-footed native that had been stung on the instep; the young man complained considerably of the pain, and the member in a couple of hours became swollen, and there were symptoms of fever in the system. A liberal dose of spirits given at intervals with an application of ammonia and the wounded member being wrapped in wet cloths seemed shortly to subdue the effects of the poison. A lump remained where the sting was for two or three days, and there was a small sloughing sore, which soon recovered, however, after being treated with carbolic ointment.

I tried some experiments with the venom on small animals. Mice died in two or three hours after being stung. A dog seemed greatly distressed during the day, and inclined to be very restless and feverish, but finally apparently recovered without being treated. Horses and cattle we were told were frequently stung without fatal effect, but there remained for a while a tumor which discharged pus. The venom seemed to have a fatal effect on any kind of an insect in a short time. If two scorpions were irritated and placed together they attempted to sting one another, which they generally managed to do, with fatal effect.

The dry, rocky, barren regions of the Boston Mountains and other spurs of the southern part of the Ozarks seem to be the natural home of the scorpion. They are invariably found among the rocks on the mountain side. Except during a very warm day they seldom venture forth from their retreats, and to find them one has to turn over the flat stones under which they lie, always with their tails curled toward their side; and I noted that it was nearly on the right side of the animal. Even after the cover of its retreat is taken away the creature will lie perfectly still until further disturbed, when it immediately erects its tail over its back and endeavors to scamper off with a quick, skipping sort of movement. While collecting I used a couple of sticks to pick them and drop them in a can or bottle of alcohol. The creatures would always make frantic efforts to pierce the sticks with their sting. This, however, they seemed unable to do. We placed a number of them in a tin box, with some leaves, where they remained for several days without disturbing one another.

If one was left in an empty box without being disturbed it soon began to walk about slowly with its arms extended in front, the little pincers opening and shutting as though it used them as feelers to examine objects. During these quiet movements its tail was extended backward, but on the least alarm it assumed a hostile attitude with the sting erected over the back. In captivity we failed to observe them in the act of eating anything, although we repeatedly placed before them flies and other insects in order to ascertain whether they used their pincers in capturing their prey. Ants, however, after being placed in this box disappeared in a manner we could not account for unless they were devoured.

They are very susceptible to cold, and seek to get under anything warm. Once we found a scorpion under our coat where we had laid it down on some rocks one cool morning while we were gathering some specimens of mineral. Natives in the mountains always shake their shoes well before putting them on if they are camped near the rocks. One can readily believe that it would hardly be pleasant on pulling on one's boot to find a scorpion or centipede in the bottom. Immediate action is the rule in such cases, and any explanation occurs after the noxious creature is gotten rid of. I heard a story told that during a protracted meeting in a school house on the mountain side when the house was filled with people of both sexes, a worthy member of well-established reputation for sobriety and quiet demeanor, suddenly, during the opening service, astonished his neighbors by leaping from his seat with loud exclamations and with frenzied haste divest himself of his pantaloons. When calmness, after a little time, had been partially restored, it was found that a scorpion had somehow made its way up the inside of his clothes, consisting of pants and shirt, and had resented being sat upon.

We were much interested to find in our collection of scorpions that they were infested with a very peculiar parasite, a little bug near the color of the scorpion's armor and itself a crustacean. The parasites, of which we saw but few, where hid about under the legs and joints of the shield of the scorpion's body. Scorpions quite probably at times shed their skins, or rather their shell covering, for I noticed under several of the stones where the creatures lay that there were the remains of the shell coverings that might have been cast off. There were also what I thought might be the egg, but of this I was not assured.

The exclusive habits of the scorpion, together with their ready means of defence and low organization, have had no doubt something to do with their survival since almost inconceivably remote ages. They have few enemies, nothing that we are aware of eats them, nobody molests them except what some of my Arkansas friends called a "natural," and whether they meant a naturalist or one lacking in the usual amount of intelligence we are still in doubt.

Inhabiting the same rocks with the scorpions is another venomous creature known as the centipede. This family is so named from the great number of its feet. It has not, however, as many pedal extremities as its name would indicate, there being but forty—twenty on each side. The body is heavily mailed and divided into sections, with a pair of legs for each.

It is a distant relative of the scorpion, and can boast of an ancestry nearly as old, since fossil remains of the creature are found finely preserved in the carboniferous rocks. It is one of the most repulsive creatures of that awful age. It is a representative of the time when land and sea with the elements were at war, where the very atmosphere was venom laden and the huge, unsightly, and unsavory cryptogramic plants came, as it were, to the rescue of the young world by absorbing the pestilent gases preparatory to the introduction of more highly organized land animals. Amid such noisome shadows and grewsome stillness, for lungs were still yet unborn, the venom-footed centipede was really king of the reeking day.

The largest centipede I saw in Arkansas was a little more than eight inches long. There has been some discussion among naturalists as to the manner in which the centipede inflicts a wound. Buckland says that it is with the first pair of legs, which are more highly developed and contain more venom. Buckland doubtless refers to its pincers, for its first pair of legs are the smallest. In my experience with these I have noticed that in attack they use the short, strong pincers in the front part of their head. In capturing a large centipede, however, I noticed that, in lifting it up with a couple of sticks after it became wounded, it continually made efforts to wrap its legs about the sticks as though making an effort to inflict wounds, but when placed in a glass jar with a lizard already in alcohol, it seized the reptile by the head with its pincers, burying them completely, and died in that position.

Yet I found that the belief was quite general among the people that if a centipede crawled over one's bare skin, that it left a poisoned trail from its feet.

Numerous seemingly well authenticated stories were told to prove this. An old farmer very feelingly narrated how his own daughter, 15 or 16 years old, lay sleeping in his cabin one warm summer night, when a centipede fell from the roof on her bare bosom. The marks left by the horrid creature made an ugly sore and nearly ruined the beauty of the girl's form.

Another curdling story was told of a soldier during the war. Having wet his clothes in crossing a swollen stream, he built a fire, before which he hung up his raiment to dry. While waiting, sitting on a rock with his back to a tree before the fire, he fell asleep, but was awakened by a strange sensation and was horrified to find a great centipede stretched out on his bare leg with its head a little elevated just over his knee. Having his revolver handy, he very quietly drew it up and shot the creature's head away. But the centipede, quivering in its death agony, immediately sank every one of its feet into the flesh of his leg. The soldier, so the story ended, died in great agony some days after from the effect of these wounds.

I noticed one day a red mark across a lad's arm, and asked him what caused it. "Where a centipede crawled over me," was the answer. A similar faint, reddish scar on the calf of a boy's leg was ascribed to the same origin.

Each one of the centipede's forty legs is covered with a hard, smooth armor of light-colored shell, most admirably jointed to permit flexibility; the last section or foot terminates in a slightly curved single joint, exceedingly sharp. This fang-like single toe is black and not very unlike the scorpion's sting. On the inside of the second section above the large toe-fang is a similar but much smaller one. One can easily conceive that a strong, muscular creature like a centipede, in crawling over the tender, sensitive skin of the human body might scratch or puncture it with these sharp, hard fang-like points, causing irritation.

I have been unable to find any poison glands connected with these foot fangs, yet still the animal may have some way of placing venom on them from the head.

I tried some experiments by placing scorpions and centipedes in a box and irritating them. The scorpion always suffered, his greater relative seeming to be too well armored for his sting to penetrate.

A tarantula, too, killed three scorpions before he himself succumbed to the sting.

Having seen a number of bats in a cavern I obtained several of these insectivorous animals and placed them in a box with a lively pair of scorpions. Next morning the bats were all dead and the scorpions as lively as ever.

Dr. Shrady Says:

"The after effects of the epidemic (la grippe) will be marked by feelings of prostration and a lowering of the health tone," to recover from which "will require tonics for variable periods."

The Best Tonic

You can take is Hood's Sarsaparilla, which, by its peculiar reviving, strengthening qualities, will lift you out of the dreary swamp of weakness and despair onto the firm rock of health and strength. Do not delay, but take it now.

"Hood's Sarsaparilla purified my blood, gave me strength, and overcame the headache and dizziness, so that I am able to work again. I recommend Hood's Sarsaparilla to others whose blood is thin or impure, and who feel worn out or run down."—LUTHER NASON, Lowell, Mass.

Hood's Sarsaparilla

Sold by all druggists. $1; six for $5. Prepared only by C. I. HOOD & CO., Apothecaries, Lowell, Mass.

100 Doses One Dollar

A NEW BURIAL SCHEME.

Our Bodies to be Dried and Put Away in Vaults With Glass Fronts.

A new disposition of the dead as proposed may be called the "latest thing in life." Ground for a "new mausoleum" is to be broken, it is said, in the spring. The idea underlying the new mausoleum is based on the fact that a current of dry air will preserve a body from decomposition, and change it into a condition resembling life, in which it will remain for an indefinite time. This process is applied by nature to the unfortunate traveller and his beast who succumb upon the great deserts. In the Smithsonian Institution are many bodies thus desiccated by nature which have been brought from the battlefields of Mexico and Peru, from Southern plains, and Indian districts of the far West. The ancient Colchians and Tartars suspended their dead from branches of trees to be dried by air and sun. The Peruvians first dried their deceased friends and then buried them in a sitting posture. Savages of South Australia place the dead body on the top of the hut till perfectly dried, when it is bandaged and hidden among the branches of the trees. The body retains its form in the process, and the skin, though it becomes hard and dry like leather, remains white, while the face, though more or less emaciated, remains life-like and recognizable.

Modern science and skill are to be applied to the original preservative power of the atmosphere. Experiments have recently been made by specialists, first on animals and later on human bodies. In the course of one recent experiment conducted by a sanitary engineer in Washington, in nine weeks a pig was reduced in weight from 22 to 7½ pounds, and remained just as plump and round as in life. In a laboratory in this city the body of a man weighing 164 pounds was subjected to the process in 1888, and the effect was marvellous.

The arrangement for the interment of desiccated bodies in the new mausoleum will be similar to that of the drawers in safety deposit vaults, while the interior plan of the building will resemble that of a well-appointed public library, with main corridor and diverging halls leading to different sections. These drawers or sepulchres will be of solid concrete four inches thick without joint or seam, of certain sizes, and arranged in tiers of six on either side of the hallway. The opening into each sepulchre will be provided with two doors, the inner one of glass hermetically sealed as soon as occupied, through which the body may be viewed by those holding the keys; the outside of iron, wrought gold, silver, or bronze, decorated and adorned according to the ability and taste of relatives.

For family use there will be separate and distinct compartments of various sizes, with sets or suites of sepulchres adorned as desired and having but a single entrance.

The space that holds the casket will be a cell of concrete permitting neither the escape nor admission of moisture. In the erection of the walls hollow pipes or conduits will be formed over moulds, so that no destructible material, as iron or metal, will be needed.

Through these conduits will be made to pour into the hermetically sealed sepulchres currents of dry air, which passing rapidly and repeatedly around the body will extract therefrom every trace of moisture, vapor, or fluid and convey it to a huge furnace, where, without possibility of escape, all noxious matter will be destroyed. Gradually the body becomes hard, smooth, and dry, with little or no change of appearance, and once done preservation is secured forever.

Provision is to be made against premature interment by the adjustment of electrical appliances to the body, so that the faintest motion will be instantaneously conveyed to the guard by means of alarm signals.

The mausoleum will occupy comparatively little space. A building covering 100 feet square could enclose 10,000 sepulchres, and one that occupied an acre would provide as many resting places as a cemetery of thirty-five acres.

It is intended that ample and suitable grounds shall surround the building, and that adornment inside and out will be made as perfect as taste and wealth can dictate.

The sepulchres will be numbered and registered as lots in a cemetery, and a fund will be provided for the perpetual care of all treasures of art or nature that may be provided. All records of interment will be kept in the mausoleum. A chapel will be provided for the discharge of the last rites.

The cost of single sepulchres will probably range from $40 to $200, while family compartments will vary from $600 to $40,000. Burial lots in cities range from $400 to $5,000 for space to allow six graves, to which must be added the cost of headstone, monument, statuary enclosure, and care.

Concrete is the material of which it is proposed to build the mausoleum. Research, ancient and modern, establish the quality of this material for impenetrability, insolubility, and consequent permanence, even an earthquake being powerless to destroy buildings made of it. This substance will no doubt be faced by ornamental materials.

THEY LIVE IN THE SLUMS.

Dear Girls Dressed in Second-hand Calico and Battered Hats.

A detachment of the Salvation Army took possession of the Young Men's Christian Association Hall the other night, Mrs. Maud Ballington Booth was in command, in full regimentals. Various officers, epauletted, silver-braided and girdled, and with broad stripes down their trousers, patrolled the aisles and assisted the audience to find seats. A score of other officers were on the platform, all apparently in dress-parade uniform except six young women who looked from a distance like choice specimens of east side candidates for an interview with Judge Duffy. They were really nothing of the sort, but they were clothed in second-hand calico gowns and ugly straw hats, that so disguised them that even Mrs. Booth challenged the audience to recognize them. One was Staff Captain Bown, and the others were her lieutenants. They have been engaged for several months past in a campaign against Satan in the "slums," and the meeting last night was held in order that the audience might learn about their work.

At the beginning there was a typical army service. Prayers were uttered in rapid succession, and hymns were sung with accompaniment on the piano and cornet obligato. The singing of the Army has improved with its uniform, and instead of the plain unison on the tune of six years ago, there was a division into parts, by which a reasonably good musical effect was attained.

The executive ability of Mrs. Booth was clearly manifested in the devotional exercises. The most fervent supplication was concluded duly when she gave the sign, and no impassioned singer hesitated to sit down and finish her solo seated the moment the commander arose. The several addresses were set off by hymns between whiles, and Mrs. Booth, of course, introduced the speakers. To begin with, she told in a general way how "these dear girls" had volunteered to go into the slums and live there like the regular inhabitants. It is a work similar to that carried on by the British Army in the Whitechapel district, and Staff Captain Bown, who conducts the campaign here, learned her duties in London eight years ago. The officers in this branch of the service have no salary. Their food and the rent of one room are paid for at headquarters; their clothing consists of cast-off garments contributed by the soldiery and others. They do not work in the regular uniform, because that would make them appear too fine for their chosen neighbors. Not only do they include religious instruction proper in their work, but they help their neighbors in household work, washing dishes, scrubbing floors, caring for babies, and the like.

Those of the slum detachment who spoke declared that they had never been so happy as since they went into this service. All spoke simply and earnestly, and a large audience listened with the closest attention, and joined heartily in such hymns as they knew.

One Way to Remove Corns.

From the San Francisco Chronicle.

POMONA, Jan. 2.—Ebon T. Marshall of Rincon, in Pomona valley, is a farmer and has large landed interests, and for years he has had corns upon the little toes of his feet, and at times has suffered so severely with them as to abandon his work on his farm. This winter he has suffered more than ever. Corn salves and other remedies had no permanent effect. Last week Marshall resolved to have both his little toes cut off in order to escape suffering from his corns, and to-day he had the operation performed. He will not be able to wear shoes for several weeks, but he says he is glad that his corns have gone for good.