

# Juniata Sentinel and Republican

B. F. SCHWEIER,

THE CONSTITUTION—THE UNION—AND THE ENFORCEMENT OF THE LAW.

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## SONG OF THE GRASS.

Peep! peep! peep! peep!  
Now I break my winter's sleep;  
Now in silence was my way  
Through the light of day.  
Upward to the fragrant mass,  
Through the dead yet living grass,  
Up, by every rainbow stain,  
Up, by every tree o'ertown,  
By the dusky fern's side,  
Where young violets lurk and hide,  
I am coming everywhere,  
Over the earth all brown and bare.

## ANOTHER SIDE OF IT.

"Now, Miss Gray, we have missed our car, and have a long walk before us, clear to Lincoln Park, so I am going to take the opportunity to tell you the story I spoke of before, for I don't want you to think that No. 21 is haunted only by ghostly memories. Well, to begin with, one dreary, rainy night, there was a ring at the bell after everybody had gone to bed, so I threw on my wrapper and went down myself, thinking it must be a telegram. But when I opened the door there stood the queerest looking man, tall and big, and my oh my! what great hands and feet he had! And such a shock of sandy, bristling hair, a freckled face, and the most comical nose I ever saw. And you would have laughed to hear his voice—such a funny one. His only baggage was a thin old carpet-sack and a cotton umbrella.

"Well, how'd'ye do?" said he. Beyond the doorway.

"Yes," says he "I did put up at the tavern and was getting ready to go, when they said they'd charge me \$3 a day, and I just thought, 'I'd pay it for them gimcracks and statters and dishes, that yer grandmother couldn't tell what's made of, I'll set on the fence all night, though they mostly be made with pig-tin on top in these parts. Now, kin you give me pork and beans and send me grub for a fair price?'"

"I think so: anywhere from \$4 to \$8 a week, according to accommodations," says I.

"That'll do," says he let's squint around.

No. 21 happened to be the only vacant room, so I showed him that, and told him it was the highest-priced room in the house, but he said it would do, and sat down in the best chair, and soaked it through from his rain-dripping clothes in five minutes.

He looked so suspicious that I made him pay in advance, and then I saw him upon the lean carpet-bag and take out a wooden bed-jack, then I left him alone in his glory.

Next morning he appeared at the table with that irresistible hair fiercer than ever, now that it was dry, and the amount he set would have run a steam boat.

I saw the young gent's smile at each other, and the older ones looked amused, and I treated for the poor fellow who—the only lady boarder I had was Miss Birch—a sea-struck on the fourth floor—and, without meaning her any harm, I must say she was the helmsheet creature that ever offended my two eyes, and as good as she was ugly. And the new boarder—Barnabas Capstick, his name was—no more saw her than he seemed to fall in love with her. Why, that very first day, when he "reckoned he'd walk down to the cross-roads 'till a spell," he brought her five cents' worth of peanuts, and from that time on his attentions were untrifling. He was all ways bringing her things, candy, illustrated papers, fruit, ribbons, cheap jewelry, and once a yellow dress pattern. He asked her to go to every entertainment that he heard of and she always refused, but that made no difference.

On the 14th of February, he sent her thirteen valentines, all directed in the same hand. And really I think it was on her account solely that he stayed so long, as the other boarders made it so unpleasant for him. There's no stopping young gents when they get started with their jokes. There were the two in 24, one in 25, those up in 36, and some from the fourth floor, that spent their winter in tormenting poor Mr. Capstick.

They would fill his pitcher with kerosene, and he would wash his face in it, and then come to me and say that the gas was certainly leaking in his room, it smells so strong. They cut fine horse-hairs over his bed in little fine bits, and if you don't know it, then the poor fellow would come down in the morning with little sores over his face, and I suppose, the rest of him, where he'd scratched the skin off. They would sew up his clothes and exchange his pantaloons for a pair that wouldn't reach his blue socks, but he'd then don like the Brother Jonathan he was, and remark that "that air goods kinder shirks." And they even played the old surprise trick on him—took him out to Burnham woods and left him holding a candle till they should drive up the game. And he held up the candle until it burnt down to some powder in the end and exploded; and the way he came calling down Eagle street about 4 o'clock in the morning suggested that he was scared, so they let it pass.

But, my I took it all so patiently, and was so good humored, and was so faithful to his true love, and he paid his board so very promptly, that I could not help liking the fellow.

He never gave much account of him-

self. He said that he had got tired of farming, and he could find something to do in the city, and was employed in a big wholesale house down Broad street. So he lived on with us for a number of months, bearing all the jokes patiently, drinking castor oil in his glass of milk, salt in his coffee, soap in his pie, and I suppose, a thousand other things that I never knew of, and grew more and more devoted to Miss Birch the more she smothered him, until one day she came into my room, and I knew she had something to say by her looks, so I let her talk on, and finally she says:

"Mrs. Compton, I do believe I'll have to marry that fellow to get rid of him."

"Well," says I, "that's a sensible way, for it's a sure one. Just marry him, and he'll trouble you little after that, I'll warrant." But bless you, how she flew up!

"Mrs. Compton," says she, "I didn't expect to be insulted by you. You know as well as I do that Barnabas is above the common run. He's so faithful and true. Why, he asked me to marry him four times last week, and five times this, and last night he sent up the loveliest note along with a quart of oysters and a pair of shoes, and now if you think he is going to neglect me like other men, you're very much mistaken!" and then she bounced out of the room, and wouldn't come back for a week, and I learned, my dear, not to take a woman at her word.

One night, a few months later, in came Barnabas, bristles up, and flaming necktie, and he seemed to have something to say. He wiggled and squirmed on his chair, cleared his throat, stared at the pictures and the ceiling, upset a vase of flowers on the table (by the way, he was the most destructive creature I ever saw, always spilling, tearing, breaking things, blundering over delicate chairs, and putting his foot through screens), and this evening he did more damage than usual. When the hours had passed until after 11, and still he sat, I told him I never sat up very late. I should have to ask him to leave. But he only fledged the more, and at last I thought he was choking, his face got fairly purple.

"Mrs. Compton," he says, "the Bible says, 'you know it is not good for man to be alone.' and I thought being as how ye was once that yourself, that maybe it wouldn't be too much to yer to be so kind as to step down. It's at the brown church of a Tuesday morning, ye know, and if you'll be there 'bout 9 o'clock we'd be much pleased," and with that he bolted through the door and was gone.

Of course, it got out through the house, and Monday night presents from the boarders began to arrive. Such loads and loads of things. I went up and there stood Barnabas and his bride in the midst of unspoken. There were brooms, scrub brushes, curry-combs, bed-bug poison, mouse traps, boot jacks, scrap enough for a century, a canned cat, a rolling pin and poker tied together with ribbons and labeled, "Firearms,"—"dangerous," a barrel of beans, hair oil and goodness knows what else.

Miss Birch was offended, and Barnabas said: "Never mind, Nanna, them things is all useful articles, and will come mighty handy in our shanty. And, Mrs. Compton, if you will kindly say to the boarders that we have got a shanty down on a cross-road quite a step down here, and we'll be happy to see 'em there to-morrow night, I'll be obliged to ye. I'll send up a wagon to take 'em down, seen' they've been so handsome."

Next morning I went down to see them married, and now when Barnabas had his hair oiled down to his head and his new suit on, he was quite a gentleman in appearance, though one of the 43 did say something about four bags when he saw his white gloves. And Miss Birch was as trim and neat as a pin, as she always was, and made a very good appearance.

When the ceremony was over they went out and got into a carriage, and were driven away. That night we were all ready, and I saw that the young gents were in for some fun, when a row of carriages—nice—drew up at the door, and a driver gave me a queer note from Barnabas and Mrs. Capstick. "He is going to be extravagant forever, I thought, but I knew his turn and wasn't surprised." But when we drew up at the beautiful gray stone house on the finest part of State street, I was amazed. I knew there must be some mistake so I ran up the steps and into the vestibule where I could see a vista of lovely rooms opening together, with rich soft carpets and beautiful furniture, looking through the glass door.

But there was Barnabas, some enough, smashing over the velvet. Apollo's Belvedere in his hands, coming to open the door himself. And we fled in and sat down, but he hadn't a word to say, and to think of the elegant supper from Moor's, and the music and lights, and poor Mr. Capstick rushing around and pushing Mrs. Capstick's shins against the Brother Jonathan he was, and remark that "that air goods kinder shirks." And they even played the old surprise trick on him—took him out to Burnham woods and left him holding a candle till they should drive up the game. And he held up the candle until it burnt down to some powder in the end and exploded; and the way he came calling down Eagle street about 4 o'clock in the morning suggested that he was scared, so they let it pass.

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## A Washington Monument.

Sketched and plans of the model for the great Washington Monument for Philadelphia are now being presented at Berlin by Professor Bahndt Siemens, who, since the recent death of Professor Drake, is probably the foremost sculptor of Germany. In November last the contract was signed by Professor Siemens and the American delegates, by the terms of which the sculptor receives 504,000 marks, or \$140,000, for executing this great work.

This sum also includes the expense for the erection of the complete monument at Philadelphia within ten years. While completing the miniature model, which received unbounded praise from connoisseurs, Professor Siemens has had a large pavilion built, in addition to his studio, under the same roof, which he is now engaged in executing the full size model for the colossal equestrian statue, as well as the other numerous figures and reliefs of the monument, a full description of which follows: All the dimensions of the monument are of great size. Its substructure consists of a huge stone terrace, with two great steps, on the lower of which all four sides are occupied by bronze groups of human figures and animals, all of them above life size.

For the latter the most characteristic species of American quadrupeds have been selected—the deer, horse, bull, grizzly bear, bison, American panther, &c. They are all in a lying position, and between each pair of them are placed the human figures which represent an Indian warrior, an Indian squaw, a river god and a goddess. These also in recumbent attitudes, with partly raised upper bodies.

In the centre of the upper terrace stands the pedestal, which on an oval platform bears the colossal equestrian statue of General Washington, both horse and rider being twice the natural size. The Father of his Country is represented in the well-known uniform and military cloak; his head is turned slightly to the left, with a keen glance of the eyes toward a distant point. In his right hand he holds a field glass pressed against the thigh like a man of war's staff. Professor Siemens has certainly admirably succeeded, in expressing Washington's chief characteristics in the face as a great-minded man and an intrepid military leader. The large side panels of the pedestal are filled by two bronze flat reliefs, with numerous figures, representing General Washington in the face of the war and on the other the return of the troops. The front and rear are occupied by two other allegorical groups in high relief, or nearly full figure. The former represents Liberty awakened and calling to the sleepers for the defence of their menaced rights, and the latter shows the blessings of a gloriously gained independence in the figure of "Victorious Liberty," holding in her hands a governing trient and an overflowing cornucopia, while the soldiers are placing laurel wreaths and captured flags at her feet. Professor Siemens is a native of Kensington, in Eastern Prussia, where he was born in 1825. He expects to be present at the unveiling of his great work in Philadelphia in 1871.

## British Women.

The women of Calcutta, are, as a rule, very beautiful, in so far as we can reconcile beauty with the olive complexion, and the dark eyes, and the air of maturity. It is not infrequently that we see women at the age of 25, with furrowed brows and crow's feet visible encroaching the corners of her large, lustrous, black eyes, and, the age of 30, may have a decided stoop and decrepit gait. This early decline is due to two causes—the very early and tender age at which nuptials are performed, and the destructive influence of the climate. Barring a relic of barbarism, the nose ring, there is no creature more comely, more lovable, than a lady of Bengal, between the ages of 12 and 18. Cleanliness is the chief virtue of the present day Calcutta. A figure somewhat below the medium height, and unhampered by a coarse or weighty skirt, arrayed in a loose flowing robe of white, the upper portion of which is thrown slightly over the hips and looped at the left side, much after the manner of the entrance to a circus tent, defining boldly the contour of a faultless figure. These ladies, in the matter of stockings, are not fastidious, as they wear no shoes, and consequently no stockings, and little of the ankle is visible between the borders of their robe and the curious little mirrored top rings and ornaments, which the luxuriant black tresses, parted at the forehead and combed in thick folds behind the ears, which are pierced in many places, and studded with jewels, and fall in one or two places over the shoulders. No ornaments are worn in the hair. Their features are regular and delicately chiselled, but too often the nose is disfigured by pearls and the wire-like ring of gold that hangs from the nostril. The large, kindly expressive eye, the handsome mouth, when wreathed in smiles, exposes a double row of perfect teeth.

## Simply a Common Lie.

"Old B." says that some years ago, in a Carolina town, a crazy man was brought before the examining board to settle the question as to whether or not he should be sent to the asylum in Columbia. After the doctor got through with his examination, one of the committee, an old farmer, said:

"My friend, did you ever borrow any bags or jugs?"

"Yes, lots of them."

"Did you ever borrow your neighbor's newspaper?"

"Yes, many a time."

"Well, now, what became of the jugs, bags and newspapers?"

"Why, I carried them all back."

The old farmer gave a blow almost as loud as Nancy Hart's whistle, and said:

"Gentlemen, he's no lunatic! just simply a common liar, and all the asylums in the world won't cure a man of lying."

## Changes at Niagara Falls.

A correspondent at Niagara notes that since the fall of Table Rock, thirty-two years ago, the Horseshoe Falls have lost their regularity of outline which suggested their name, and indications in at least two spots give them an angular appearance not unlike the letter W in general shape. This is accounted for by the wearing away of the brink more rapidly at these two points than anywhere else along the entire edge of the Canadian falls. Another change, and one that the natives of these parts greatly marvel at, is the spouting of water by these same Horseshoe Falls. The older and more observing villagers solemnly declare that this curious spectacle has been growing more and more noticeable for the past three years, until it has become so, well defined that the name of the Spouting Horseshoe is now applied to that portion of the Canadian Falls. None of them pretend to know the cause of this singular action of the waters. They content themselves with pointing it out as another curious freak of nature, bound to add an attraction to the vicinity and to swell an income which has never been inconsiderable in the duldest of summers. It is best observed on a clear sunny day, when but little wind disturbs the surface of the river. From the center of the Suspension Bridge, which is about a quarter of a mile below the Horseshoe, the spouting is clearly visible. On such a day the clouds of vapor barely rise to a height of two-thirds of the falls, and the brink is never obscured by the mist. Under such conditions the eye has an unobstructed view of the dark blue waters as they hurry toward the edge of the precipice, only to be transformed into a broad sheet of milky whiteness, when they take the plunge and disappear in the eternal clouds of mist that envelop the foot of the cataract. Suddenly there rises to a level with the top of the falls a mass of spray, increasing in volume and rising in height until from their midst spout a number of well-defined jets which mount upward many feet and then melt away in vapor. Assuming 150 feet, the generally recognized figure to be the altitude of the Horseshoe Falls, these jets seemingly must shoot upward to a height of 200 feet. They certainly add a variety to the scene, and attract at once the attention of visitors. The duration of this phenomenon, if such it can be called, is from 10 to 15 seconds. The clouds of vapor, like volumes of white smoke continue to fill the air above the Horseshoe for full half a minute after the jets have lost all outline, and then they, too, gradually die away, and for about 10 seconds longer the spot is again free from all turbulence, and nothing but a stretch of waters as far as the rapids is presented to the view. Sometimes these jets of water drop their tassel like tips in a graceful arc, inclining toward the Canadian shore, and again they fall over upon the brink of the Horseshoe. The regularity with which these slender, tapering jets appear and disappear is one of the features of a peculiar exhibition which promises to excite as much attention as any disturbance in the outline of the falls themselves that has been noted in recent years.

## Europe had it among their choicest jewelry, as breast-pins, earrings, etc."

During the time of the first Napoleon red—a deep red—coral was in style, and that color commanded the highest price; but the English of late years, following the style of the ex-Emperer Eugenie, have taken the "extra rose," as it better suits the blonde complexion of *les Anglaises*. Besides, it is the rarest of coral. In Spain, on the contrary, the *Brucetta d'Espagne* went the deep red of the first empire to set off their darker complexion.

In India, Persia, China and Japan the dark red commands a very high price, being, in the first two centuries, used to adorn the turbans, and the handles of their swords and poniards, and also as rosaries by the priests and as charms placed on the bodies of the dead to drive away evil spirits. In China it is a great value as buttons of office for the mandarins' caps. In Japan coral is also used as a badge of distinction.

From Italy coral has hitherto been exported to Japan, but recently there has come to Italy a pink coral of good color, purporting to be found in Japanese waters. It is of immense size—one piece is said to have measured fifteen inches wide and five feet long. The Challenger, in a dredging off the coast of Japan, never found it, neither did any of the staff ever hear of it from the Japanese, and Prof. Mosley is inclined to doubt if it comes from Japan. Nevertheless it has been brought to Italy, and I have seen specimens at Sig. Casalta's, as fine as the best rose of Sardinia. Letters have already been sent to Japan concerning it, and I hope some day to find out its "local habitation" and write you thereon.

## Models of Lovely Hands.

The craze has been revived among professionals and fashionable beauties upon whom nature has bestowed that rarest of gifts, a shapely hand, which is so rarely met with in the world. From Italy coral has hitherto been exported to Japan, but recently there has come to Italy a pink coral of good color, purporting to be found in Japanese waters. It is of immense size—one piece is said to have measured fifteen inches wide and five feet long. The Challenger, in a dredging off the coast of Japan, never found it, neither did any of the staff ever hear of it from the Japanese, and Prof. Mosley is inclined to doubt if it comes from Japan. Nevertheless it has been brought to Italy, and I have seen specimens at Sig. Casalta's, as fine as the best rose of Sardinia. Letters have already been sent to Japan concerning it, and I hope some day to find out its "local habitation" and write you thereon.

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## Coral Beauties.

Sig. Casalta was at the Edinburgh Exhibition and won the large gold medal, (only one of many of a similar kind won at several of the great world's exhibitions) for a variety of coral, for artistic work in this precious material, as well as for cameo-shell work. Some of the objects shown are the result of not only mere mechanical labor, but of the finest art labor which could only come from the skilled hands and practiced eye of men brought up from childhood in an atmosphere of art. Some of the cameos were remarkable for their size and for their artistic value, copies for a some of the famous floating figures found in the "house of Cicero" in Pompeii.

Among the cameos were two magnificent pieces representing "Le Fuena di Amore" (Cupid's Forge), and "L'Anima Elevata dalle proprie Virtu," which might be considered the perfection of art.

Sig. Casalta was represented at Edinburgh by his son, who speaks English, and, at the conclusion of the exhibition, presented a fine collection of specimens of unworked coral to the museum of science and art, an institution somewhat famous, the laying of the cornerstone of which was the last public official act of the late prince consort.

I have written once before in regard to the immense prices paid for precious coral, and have stated that the best coral is worth five times its weight in gold. I now find that I understand the price, for Mr. Casalta informs me that the finest pink coral (known in the trade as "extra rose") has often commanded from \$400 to \$600 per ounce, and that he once paid for the very finest piece of "extra rose" that he ever saw at the rate of 6000 francs per ounce—i. e., in round numbers \$1200 per ounce. Now as each ounce of gold is worth \$16 we can see that this unsurpassed piece of fine coral was worth seventy-five times its weight in gold. But Mr. Casalta offered another consideration—i. e., that in cutting up and filling away, and washing this fine coral enough was lost to make its price really more than one hundred times that of gold. He further informed me that coral of this preciousness was, when worked up into ornaments, really valued by the carat, and was treated as a precious stone, and was set with pearls and diamonds. I asked him what such highly-prized and high-priced coral was used for, and the reply was that "the English nobility and millionaires greatly esteem it when set in rings, and a few of the crowned heads of Europe had it."

## Chinese Stock Farming.

An interesting account of the establishment of a stock farm by the viceroys of the province of Chihpe, in China, had been given by the American Consul-General at Shanghai. In one of his previous reports he had pointed out that the Mongolian herd could be greatly increased in value by the establishment of a farm at some convenient locality, at which fine stock, horses, cattle, and sheep could be bred. This report came under the cognizance of his Excellency Li, with the result that an interview between the Consul-General, a breeder from New York, and Li was brought about. The New York breeder urged the advantages of a good stock farm very strongly, and his Excellency took up the matter warmly. Through his active interest and influence, Mr. Tang King Sing, an active and progressive mandarin, was convinced of the superiority of Western breeds, and at once declared his willingness to give them a trial. His farm consists of about 5,000 acres, near the Kiping coal mines, now being opened by foreign engineers under his superintendence, situated about 80 miles to the north of Tientsin. He has obtained some United States cattle, which will be used with the native stock for the purpose of testing the practicality of the suggestions which have been made. Mr. Tang King Sing announces that in the promotion of this enterprise his object is to afford his countrymen an opportunity to become possessed of at least a portion of the science already attained by Western nations in the improvement of their breedstock cattle. The result of this movement will be watched with no little interest.

## The Suez Canal.

The Suez Canal which now has assumed a position of greater importance than it has ever before, was begun towards the close of 1859. Work was prosecuted steadily until 1862, when there was a kind among the authorities, and had it not been for the enterprise and liberality of the late Emperor of France, who advanced \$19,000,000 to the Viceroy to be paid to the Company, it is doubtful whether the gigantic undertaking ever would have been finished. The water began to flow from the Mediterranean in February, 1869, and from the Red Sea in July, and by the middle of October of the same year, navigation was a settled thing.

The whole length of the navigation is 88 miles; of this 66 miles are actual canal, formed by cuttings, 14 miles are dredged through the lakes, and 8 miles required no work, the natural depth being equal to that of the canal. The depth of the canal throughout is 26 feet, for a width of 72 feet at the bottom. The width at the surface is 325 feet. Its actual width does not permit of two vessels passing or crossing each other in the canal itself, but there are numerous sidings by which vessels are enabled to cross one another and the passage is quickened. The largest vessel that ever passed through the canal measured 430 feet in length, with a draught of 25 feet 9 inches. The cost of the whole undertaking was \$17,518,729, exclusive of \$1,360,000 issued to pay for coupons on shares in arrears during part of the period of construction. Nearly 30,000 laborers were employed, and for their use a supply of fresh water was conveyed from the Nile at Cairo and distributed along the whole length of the canal, a work which of itself was one of no small magnitude. During the work about 80,000 cubic yards of material were excavated and at one time sixty dredging machines were at work.

## The Wise Peasant.

A wealthy peasant, who felt that his hours were numbered, called his sons around his bedside and began:

"James, you are the oldest, and I bequeath you my blessing."

The second son came forward with bowed head, and the father said:

"John Henry, you have been a good boy, and I bequeath you my good name."

The third son showed up and the old man kindly remarked:

"Andrew Jackson, you are my youngest. Good-bye, you are dear sons. Each of you press my hand for the last time, and then skip back to the field, for this is glorious weather for corn."

"But, dad, you are worth \$20,000!" they protested in a chorus.

"That is true, boys, but I have tried to make an equal division. I have left all the money to you and all the money to the lawyers. They would have got your mother a fool and your father a lunatic, besides, I die happy and full of peace."

"Bury me just to the left of the old cowshed, and pay for my tombstone on the monthly instalment system."

Moral: The lawyers were of course dissatisfied with the will, and carried the case into court.

## Sun Trappings.

The Pennsylvania Railroad Company has adopted a process of copying plans and outlines so simple and yet so effective as to have an important bearing on all the methods of engraving, lithography, photography and the like. It is known as the "blue print process" and is a sort of easy photography, by means of which a mere child may copy in the most perfect and exact manner any drawing or plan. The lines of which can be embraced in the dimensions of a large pane of window glass, for instance. Larger outlines can be copied, but require more care and a little more apparatus.

A piece of pure, uncolored paper is taken and made "sensitive" by means of a chemical wash, consisting of 15 ounces of red prussiate of potash and 1 ounce of citric acid dissolved in 16 ounces of water. This, when applied to the paper in a dark closet by means of a broad cloth brush, gives a peculiarly rich, glistening, yellow surface. This paper when dry is ready for printing. If at this stage a fern leaf is taken or a few sprays of grass or a feather or any drawing executed on translucent material, such as onion-skin paper, it may be perfectly copied in every minute detail within the space of four or five minutes. The object is simply laid on the paper and a piece of glass put over it to hold it in position and protect it from the light. The yellow paper then turns rapidly to a dull blue, then to a light gray, whereupon, at the expiration of about three minutes, it is withdrawn. But one thing remains to be done; the sensitive paper is given a bath in pure water and instantly a perfect copy of the fern leaf, grass or drawing appears on the blue surface of the paper, in white, as if traced by hand. The philosophy of the process is that the black lines of the drawing or the filaments of the grass or fern are opaque, and consequently refuse admittance to the light, which operates upon the open, sensitive spaces, causing them to undergo a chemical change. As utilized by railroads, iron compasses, shipbuilders and architects and artists, however, in multiplying their many plans and even circular letters, the process becomes a little more complicated. Instead of merely placing the design to be printed over the sensitive sheet and leaving the rest to the light, large glass frames, with wooden lids, are used, instead of which the drawing is placed, face downward, and covered with the sensitive paper. The frame is then reversed, leaving the plan exposed to the light. A full bright sun is not absolutely requisite, but a longer time is required for exposure on a cloudy day. There is one photographic firm that uses the electric light entirely and prints by night as well as by day. A step further has been made also in producing a white background with blue lines.

## Live Stock.

According to the Census returns the live stock on farms in the United States on the 1st, 1880, was as follows:

Horses, 10,357,981; mules and asses, 1,812,932; working oxen, 993,970; milch cows, 12,443,933; other cattle, 22,488,500; sheep, 35,191,635; swine, 47,683,851.

The rate of increase from 1870 to 1880 was, in horses, 45 per cent; mules and asses, 61 per cent; milch cows, 39 per cent; other cattle, 65 per cent; sheep, 24 per cent; and swine, 90 per cent.

In working oxen there was a decrease of 25 per cent.

## China's Stock Farming.

An interesting account of the establishment of a stock farm by the viceroys of the province of Chihpe, in China, had been given by the American Consul-General at Shanghai. In one of his previous reports he had pointed out that the Mongolian herd could be greatly increased in value by the establishment of a farm at some convenient locality, at which fine stock, horses, cattle, and sheep could be bred. This report came under the cognizance of his Excellency Li, with the result that an interview between the Consul-General, a breeder from New York, and Li was brought about. The New York breeder urged the advantages of a good stock farm very strongly, and his Excellency took up the matter warmly. Through his active interest and influence, Mr. Tang King Sing, an active and progressive mandarin, was convinced of the superiority of Western breeds, and at once declared his willingness to give them a trial. His farm consists of about 5,000 acres, near the Kiping coal mines, now being opened by foreign engineers under his superintendence, situated about 80 miles to the north of Tientsin. He has obtained some United States cattle, which will be used with the native stock for the purpose of testing the practicality of the suggestions which have been made. Mr. Tang King Sing announces that in the promotion of this enterprise his object is to afford his countrymen an opportunity to become possessed of at least a portion of the science already attained by Western nations in the improvement of their breedstock cattle. The result of this movement will be watched with no little interest.

## The Suez Canal.

The Suez Canal which now has assumed a position of greater importance than it has ever before, was begun towards the close of 1859. Work was prosecuted steadily until 1862, when there was a kind among the authorities, and had it not been for the enterprise and liberality of the late Emperor of France, who advanced \$19,000,000 to the Viceroy to be paid to the Company, it is doubtful whether the gigantic undertaking ever would have been finished. The water began to flow from the Mediterranean in February, 1869, and from the Red Sea in July, and by the middle of October of the same year, navigation was a settled thing.

The whole length of the navigation is 88 miles; of this 66 miles are actual canal, formed by cuttings, 14 miles are dredged through the lakes, and 8 miles required no work, the natural depth being equal to that of the canal. The depth of the canal throughout is 26 feet, for a width of 72 feet at the bottom. The width at the surface is 325 feet. Its actual width does not permit of two vessels passing or crossing each other in the canal itself, but there are numerous sidings by which vessels are enabled to cross one another and the passage is quickened. The largest vessel that ever passed through the canal measured 430 feet in length, with a draught of 25 feet 9 inches. The cost of the whole undertaking was \$17,518,729, exclusive of \$1,360,000 issued to pay for coupons on shares in arrears during part of the period of construction. Nearly 30,000 laborers were employed, and for their use a supply of fresh water was conveyed from the Nile at Cairo and distributed along the whole length of the canal, a work which of itself was one of no small magnitude. During the work about 80,000 cubic yards of material were excavated and at one time sixty dredging machines were at work.

## The Wise Peasant.

A wealthy peasant, who felt that his hours were numbered, called his sons around his bedside and began:

"James, you are the oldest, and I bequeath you my blessing."

The second son came forward with bowed head, and the father said:

"John Henry, you have been a good boy, and I bequeath you my good name."

The third son showed up and the old man kindly remarked:

"Andrew Jackson, you are my youngest. Good-bye, you are dear sons. Each of you press my hand for the last time, and then skip back to the field, for this is glorious weather for corn."

"But, dad, you are worth \$20,000!" they protested in a chorus.

"That is true, boys, but I have tried to make an equal division. I have left all the money to you and all the money to the lawyers. They would have got your mother a fool and your father a lunatic, besides, I die happy and full of peace."

"Bury me just to the left of the old cowshed, and pay for my tombstone on the monthly instalment system."

Moral: The lawyers were of course dissatisfied with the will, and carried the case into court.

## Sun Trappings.

The Pennsylvania Railroad Company has adopted a process of copying plans and outlines so simple and yet so effective as to have an important bearing on all the methods of engraving, lithography, photography and the like. It is known as the "blue print process" and is a sort of easy photography, by means of which a mere child may copy in the most perfect and exact manner any drawing or plan. The lines of which can be embraced in the dimensions of a large pane of window glass, for instance. Larger outlines can be copied, but require