AMONG THE HORSES.

Requirements of Standard-Bred Animals and Influence of Blood.

Thoroughbred Cross Considered in Connection With Trotting Capacity.

Obligations of Breeders Very Pertinently Stated by One Writer.

Instances Proving the Popularity of Trotting--Group of Etchings.

A horse or mare to be eligible to registration in the English or American stud book must have seven uncontaminated crosses to the Barb, says Albemarle, the well-known turf writer in the New York Sportsman. This gives 127 parts of pure blood out of a possible 128. Of the value of this blood when injected into a cold pedigree there has been much discussion, and yet it seems strange that a difference of opinion should exist regarding demonstrated facts. We know that a common farm mare bred to a thoroughbred horse will produce offspring capable of being made much superior as a work horse to one of cold blood. The high courage and endurance of the thoroughbred enable him to far excel a "dung-hill," even in performing the ordinary drudgery of team work.

Why should not thorough blood injected judiciously benefit a trotting pedigree? The thoroughbred has been bred for many generations for excellence of racing conformation, capacity for great lung power, and for the muscular development that shall enable a performer to carry the highest rate of speed for the greatest possible distance. These are just the points in which the trotter must excel, the only difference in the essential requirements of a thorough trotter and thoroughbred race horse being in the gait or manner of locomotion. The thoroughbred is fleet of foot, and has a capacity for speed and endurance because the instinct and muscular development has been handed down implanted and intensified by many generations developed in the same methods. The trotter receives his instinct and capacity in the same manner. We see foals in which the trotting instinct is so strong that the trot seems the only natural gait when the babies get in a hurry.

We know that the instincts of the thoroughbred do not teach him to stick to his pure trotting gait when he is hurried. The natural impulse then is to run. When the trotting instinct is strong enough in a trotter it knows no faster gait, especially if developed, and if forced beyond the speed capacity of that gait, it cannot run, and we call it a tangled or stand-still break. Trotters that are capable of running faster than they can trot are rarely reliable when pushed to the highest point of speed.

So far only one trotter out of a strictly thoroughbred mare has shown extreme speed. Palo Alto, however, has demonstrated that even if he stands alone in point of breeding he also stands at the very head of the list, and a faster, gamer performer was never bred by any combination of blood lines.

The direct union of trotting and thorough blood forms too abrupt a uniting of opposites to expect trotters in the first generation except an occasional one. With the thorough blood in the second generation, however, very satisfactory results have been obtained. Look over the 2:12 list and see how many of the performers carry a strong infusion of thorough blood.

Sunol, 2:08¾, by Electioneer, dam Waxana, by Gen. Benton, grandam Waxana, by Lexington, thoroughbred.

Maud S, 2:08¾, by Harold, dam Miss Russell, by Pilot Jr. (he was out of a thoroughbred mare), grandam Sally Russell, by Boston, thoroughbred.

Nancy Hanks, 2:09, by Happy Medium, dam Nancy Lee, by Dictator (nearly half thoroughbred), grandam Sophie, by Edwin Forrest, nearly all throughbred.

Allerton, 2:09¾, by Jay Bird, dam Gussie Wilkes, by Mambrino Boy, grandam Nora Wilkes, by George Wilkes. Mamorino Boy was by Mambrino Patchen (nearly half thoroughbred), out of Roving Nelly, by Cassius M Clay, and he was out of a mare by a son of Eclipse, thoroughbred, and she again out of a mare by imported Messenger. The grandam of Mambrino Boy was by Berthune, thoroughbred.

Palo Alto, 2:09¾, by Electioneer, dam Dame Winnie, by Planet, thoroughbred.

Jay-Eye-See, 2:10, by Dictator (nearly half-thoroughbred), dam Midnight, by Pilot Jr. (he was out of a thoroughbred mare), grandam Twilight, by Lexington, thoroughbred.

Nelson, 2:10, is bred in purely trotting and pacing lines.

Guy, 2:10¾, by Kentucky Prince, dam Flora Gardner, by American Star, grandam by Bay Richmond, thoroughbred. The dam of Kentucky Prince was Kentucky Queen, by Morgan Eagle out of a thoroughbred mare, so that Guy carries about 62½ per cent of warm or thorough blood

Stamboul, 2:11, is bred in purely trotting lines.

St. Julien, 2:11¾, by Volunteer (out of the thoroughbred mare Lady Patriot), dam Flora, by Harry Clay, 2:20, grandam by Napoleon. To warm the blood of Lady Patriot was largely due the qualities that made St. Julien in his prime aptly termed the greatest campaigner that ever looked through a bridle.

Delmarch, 2:11½, is by Mambrino, 2:21¾, dam by George Wilkes, grandam by a son of Lexington, thoroughbred.

Axtell, 2:12, is by William L, dam Lou, by Mambrino Boy, grandam by son of Mambrino Pilot. William L is out of Lady Bunker, by Mambrino Patchen, and she out of Lady Dunn, by American Star. Mambrino Boy has a strong infusion of thorough blood, and so has Mambrino Pilot. With the entire combination Axtell carries more than 25 per cent of warm blood.

American Star was, perhaps, the first horse largely or wholly thoroughbred to figure prominently in the pedigree of trotters. Upon the blood of American Star Hambletonian got all of his direct extreme speed. Outside of the Star blood Hambletonian never sired a 2:20 performer. Lady Thorn, 2:18¼, was probably the fastest trotter of her day, if not at any time up to the time of Maud S and Jay Eye See. She represented a union of Mambrino Chief and the blood of Gano, son of thoroughbred Eclipse. The blood of Bonnie Scotland has been an important factor in successful trotting pedigrees, and so has that of Lexington, both taking kindly to the trotting action. Indeed, Bonnie Scotland has sired one, and perhaps two, 2:30 performers. Trotting breeders should not lose sight of the fact that the thorough blood that has been most successful in producing great trotters is the blood that has been most successful in producing great racehorses.

TROTTING IS POPULAR.

A Few Instances to Prove the Assertion.

In view of the talk that popular interest in trotting races is dying out it is proper to note that at Independence, Io., the attendance while being large every day, ran up to over 18,000 one day. At Lexington, Ky., the attendance ranged from 10,000 to 15,000 each day. At Terre Haute, Ind., 12,000 turned out one day to see the trotters. At White River Junction, Vt., 10,000 turned out, and at the little city of Washington Court House, O., 35,000 people were present on each of the last two days. Here, then, were five trotting meetings that drew on their best days from 10,000 to 35,000 spectators, and yet at the biggest running events of the year the best authorities admit that the attendance has been small compared to the 30,000 or 40,000 that used to turn out a few years ago on the days when the big events were to be decided.

This does not look as though the trotter was growing unpopular, and the truth is that ten persons go to the trotting races now-a-days where one used to go a dozen years ago. At that time trotting races were confined to the larger cities, but now every county has its track and gives a meeting or two each year. It is no exaggeration to say that during every week in the summer months 200 trotting meetings were held in the United States to possibly twenty running meetings. Let those who are prophesying the dying out of trotting meetings in popular favor consider these facts before becoming too emphatic in their statements.

BREEDERS' OBLIGATIONS.

Some Pertinent Observations on the Subject.

There are a great many very respectable gentlemen who own stock farms, who have very singular views as to their obligations to their patrons, says a noted turf writer. There are men who certainly would not take to thimble-rigging, or stacking cards, or any of the "regular" professional methods of taking another's money, who take it none the less dishonestly by shutting their eyes to their obligations. Now, breeders, just look at the mares sent to your farms when they come and look at them when they go away. If they go away poor, when they came in good condition, the chances are ten to one that they are not in foal. If they came in good condition and go away equally healthy and strong, you have done your duty in this respect and the chances are a just average that your patron has received his dues. If the mare comes poor and goes away in good condition, it is an advertisement to the breeding world that you are an honest man, that you have done your duty in the premises, and the chances are more than the average that the mare is in foal. To reduce the matter to a few words, it is improbable that a mare will get with foal in a failing condition of health. The chances are good if her initial condition is maintained, while the chances are excellent when the mare is in a gaining condition. Every breeder should have scales on his farm and enter in a book the weight, and a note of the condition of the mares when they come. Be just to your patrons and your own reputation, and be sure, when you send back their mares, let it not be said that they left 100 pounds or more of their substance on your farm in a short visit of one or two months.

LOOKING AHEAD.

Probable Reason for a Recent Action.

With the coming of the world's fair a season of racing will open in Chicago such as has never before been seen. From the spring thaws to the autumn snows immense crowds will pour money into the boxes of any clubs that provide the desired sport. Already the Garfield Park club has announced its intention of racing throughout the season, and its remarkable growth has already made it too formidable a rival to be overlooked. The prospect is too rich for the Washington Park people to let the fruition escape them, and they withdrew from the turf congress, where they would necessarily rest idle and respect the dates of half a dozen other clubs while Garfield Park gathered in the money day after day, with the president of the turf congress in its judges' stand. In consequence, the golden harvest of 1893 will not be reaped by any one club.

The Great Drivers.

The following are all the drivers that have succeeded in giving two or more trotters in the 2:15 list their best records: Bubb Doble, four—Nancy Hanks, 2:09; Delmarch, 2:11½; Jack, 2:12¼, and Goldsmith Maid, 2:14. Orrin Hickok, four—Stamboul, 2:11; St. Julien, 2:11¼; Arab, 2:15, and Balkan, 2:15. C. W. Williams, three—Allerton, 2:09¾; Axtell, 2:12, and Mary Marshall, 2:12¾. Ed Bithers, two—Jay Eye See, 2:10, and Phallas, 2:13¾. Andy McDowell, two—Margaret S, 2:12¼, and Homestake, 2:14¼. Frank Van Ness, two—Harry Wilkes, 2:13½, and Rosaline Wilkes, 2:14½. Crit Davis, two—Prince Wilkes, 2:14¾, and Bonnie Wilmore, 2:14½. Charles Marvin, three—Sunol, 2:08¾; Palo Alto, 2:11¾, and Arion, 2:14¼. John Murphy, two—Maxie Cobb, 2:13¼, and Majolica, 2:15.

A Good Purchase.

S. E. Larabie, of Deer Lodge, Mont., has bought from the Erdenheim stud the imported brood mare Clara, by Dutch Skater—Expectation. Clara is eleven years old. Under the name of Clara B she raced well in her three and four-year-old form. She has had only three foals trained, but their showing indicates that Mr. Larabie has made a good purchase. Cartoon and Reclare, both by Reform, are famous race horses, and Proteinal, a two year-old by Pardee, won at five furlongs in 1:05¼. Clara is now in foal to The Bard.

A Suggestive Statement.

A keen observer and practical horseman, who has been traveling extensively among the stock farms North and South, says: "I had found lots of trotters, but very few handsome, game, honest roadsters." This is a very suggestive statement. There is sure to be a great demand a few years hence for handsome, game, honest roadsters, and the breeder who shapes his course so as to produce this class of horses is sure to find the business profitable.

ENTRIES FOR TO-DAY.

Horses Which Are to Start at Four Tracks.

CHICAGO, Nov. 15.—The entries for Garfield Park to-morrow are:

Handicap hurdle, nine furlongs—Speculator, 132; Winslow, Bassanio, 160; Lijero, 147; Bob Thomas, 142; Iowa, 135.

Selling, six furlongs—Hansell, J J, 93; Billy Coleman, Frank Lilly, Whittier, Gunshot, 95; Leo Lewis, 97; McMurtry, 99; Jack Brady, 101; Capt. Ruby, 103; Adelin, 105; Zed, 117.

Selling, six furlongs—Little Midget, 93; Okeeta, 96; Annie Clark, 96; Bill Nye, 96; Crispino, 98; Oakdale, 101; Pilgrim, 102; One Dime, 102; Rouser, 104; Kismet, 104; Jim Dunn, 110.

Selling, mile—Annie Clark, 96; Tenor, 101; Clarion, 104; St. Albans, 106.

Handicap, two-year-olds, six furlongs—Jim Murphy, 98; Dolly Nobles, 84; Ray S, 104; Big Casino, Katurah, 94; Invercauld, 95; Zantippa, 99; W B, 95; Notus, 106; Cruikshank, 84; Jennie S, 102; Umatilla, 94.

Maidens, one mile—Maggie Jordan, Annie N, Highland, 107; Red Prince, Sea King, Sir Bevys, Bon Ton, Galbanum, Message, Gov. Wheeler.

AT GUTTENBURG.

Seven-eighths of a mile, selling—Longard, War Paint colt, 106; Irregular, 106; Padre, 105; Circular, Bon Voyage, 102; Joe Kelly, Double Cross, 100; Majestic, 96; Reba T, McKeever, 95; Mollie Davis, 89.

Mile—Tioga, 110; Donohue, 113; Onaway, Hyperion, 112; Sandstone, 110; Issaquena filly, Forest King, Granite, 109; Alderman Mac, 108; Cyrus, Maywood, 105; Glenlochy, 103.

Six and a half furlongs, selling—Emperor Otho, 110; Toano, 107; Mountain Deer, 106; Roquefort, 105; Gertie D, 102; Mohican, 99; Rico, 97.

Seven-eighths of a mile—Cynosure, 115; Saunterer, Houston, 102; Gloster, 94; Blitzen, 74.

Mile and a sixteenth, selling—Castaway II., Esquimau, 112; Rover, 105; Pelham, 97; Perlid, 95; Bonnie King, 92; Baylor, 87; John Hickey, Bertha Campbell, 77.

Seven-eighths of a mile, selling—Longstride, 116; Sparling, 115; Puzzle, Congress, 114; Australiz, Little Jim, 113; Algernon, Firefly, 112; Pericles, Kitty, Little Minnie, 110; Gold Wave, Dago, Rialto, 99; Maggie Murphy, 94; Onager, 89.

AT NASHVILLE.

Selling, six furlongs—Stark, Chicago, Castilian, Puente, Sidney, 104; Maud B, Mean Enough, 105; Catoosa, Dick Delaney, Climax II, Don, Deleon, Longbroeck, 107; Billy Smith, 108; Horace Leland, 110; Jack Star, 111; Rosa, Lady Blackburn, 113; Ruby Payne, 116.

Selling, thirteen-sixteenths—Sophia Hardy, 86; Buckbound, 99; Elzarra, 102; Belle Redmond, 104; Drift, 109; Marietta, 110; J T, Golden Slipper, Ireland, St. Paul, 113; Nero, 117.

Handicap, six furlongs—Pearl Rivers, 85; Reuben Payne, 87; Julius Sax, 95; Tom Elliott, 110; Lizzie English, 95; Ed Eshelly, 96; Blaze Duke, 100; Gold Stone, 102; Ceverton, 103; Springaway, 108; Baily, 115.

Mile—Queenie Trowbridge, 90; Grandpa, 92; Vashti, 94; Pat King, 97; Waldo, 97; Leader II., 100; Golden Slipper, 101; Argenta, 104.

Selling, five furlongs—Pearl Rivers, 91; Bill Bailey, 92; Henry Jenkins, 103; Maggie Lebus, 104; Sophia Hardy, 104; Sullivan, 105; Zoolein, 105; Critic, 105; Buckhound, 109.

AT GLOUCESTER.

Seven and a half furlongs, selling—Landseer, 113; Jersey Pat, 110; Arizona, 110; Question, 107; Frank L, 106; Mackenzie, 106; Judge Nelson, 106; Capstone, 106; Monroe, 106; Glenall, 105; Edward F, 102; Salute, 99; Little Dick, 97; Grafton, 97; Preston B, 82.

Five furlongs, two-year-old maidens, selling—Botheration, 101; Copeland, 103; Coronet, 103; Jack Pot, 103; Mr. Manning, 103; Mart, 100; Ed Marks, 100; Woodberry, 100; Darius, 100; Turner, 100; Baby, 100; Wildfire colt, 100.

Four and a half furlongs, selling—Foxhill, 116; Thad Rowe, 110; Young Lotter, Norwood, 108; Adolph, Lomax, 107; Censor, 105; Nettie, 105; Black Diamond, 100; Hydra, 99; Maid of Richland, 97; Illian, 96; Dunham, Major Hughes, 95; Zingara, 90.

Seven furlongs, selling or non-selling—Rancocas, Lonely, 112; Sir William, 104; Crispino, 103; Pembroke, 101; Mabel, 99; Pliny, Flattery, 98; Cartoon, 96; Lotion, 92; Oberlin, 91; Salvini, Punster Jr, 90; Emma J, 84; Carmelite, 82.

Six and a half furlongs, selling—Umpire Kelly, 117; Ballston, Kanesville, Lita, 107; Chartreuse, 105; Can't Tell, Dalesman, 104; Passmore, 99.

Three-quarters of a mile, selling—Blackburn, 127; Battle Cry, Topmast, 122; Rustic, Patrocles, Fitzroy, Boojack, Wm Henry, Lancaster, Glendale, P J H, 117; Sunflower, 114; Solicitor, Twilight colt, 112; Cutalong, 109.

Have a Chance to Win.

Nashville—Sidney and Castillian, Nero and Buckhound, Ceverton and Rally, Argenta and Queenie Trowbridge, Maggie Lebus and Pearl Rivers.

Guttenburg—McKeever and Irregular, Tioga and Onaway, Toano and Mohican, Saunterer and Houston, Castaway and Esquimau, Firefly and Sparling.

Garfield—Winslow and Lijero, Gunshot and McMurtry, Jim Dunn and Oakdale, Clarion and St. Albans, Katurah and Jennie S, Gov. Wheeler and Maggie Jordan.

Gloucester—Question and Landseer, Botheration and Baby, Foxhill and Thad Rowe, Rancocas and Oberlin, Ballston and Chartreuse, Fitzroy and Rustic.

EQUINE ETCHINGS.

There is much less talk now than formerly on the subject of quitters among trotters, whole families then coming in for such characterization. Among those thus blackened were the Happy Mediums, but when they come along and step like Nancy Hanks, the talk ceases on the subject, and the need for quitting is greatly lessened, though it should not be forgotten that the dead game Dictator blood is there also.

Allerton's shoes weighed just five ounces in front and three behind when he reduced his mark to 2:09¾. He wears only such boots as prudence suggests for protection against possible accident, and none from necessity. He is checked only to his natural position, and wears no blinds. He can trot his best clip without pulling a pound on the bit.

In Queensland, Australia, the horse market is away down. A sound, well-broken animal can be bought for $5. Farmers in the interior cannot afford to send horses to Prisbane for sale because ordinary stock will not bring more than $1.75 per head. They shoot them instead. And, what is still more startling, they pay at the rate of 62 cents per head for having them shot.

A short-bred horse without speed is of very little value, but if he can march like a race horse and win his races at the last end of them he will soon find a buyer. Men breed in certain lines only to reduce the chances of getting a turf performer or stock horse of great value. Still, at times, a radical outcross produces a phenomenon, Palo Alto being the most prominent axample.

The fast horse is not always the great race horse. Ability to repeat heats in close order is the article that is wanted in the trotting and pacing world. Speed will win heats frequently, but with endurance as running mate it brings the money. A brushy horse is an admirable article to parade, but a very poor representative when the company is fast and the heats are split.

Speaking of novel attempts and efforts to get near the two-minute mark, how would it do to hook a pair of trotters or pacers on each side of a runner and cut them loose? The three should go a very fast mile rigged that way with a strong, low-going galloper to pull the bulk of the weight, and at the same time they would enjoy all the advantages derived from performing in double harness.

Horses boarded at Cloverdale Stock Farm, Lake Elmo. Good feed, care and attendance, and paddocks for exercise. Stock left at 965 East Seventh street, corner of Fauquier, will be called for and returned. Truman Strobridge, manager, 194 East Seventh street, St. Paul.

Horses boarded at Grasmere stock farm. Single and box stalls, nice paddocks. Good care and attention. For terms and particulars call at 110 East Third, St. Paul.

Don't start your horse off with a cut of the whip, says an old horseman. Speak to him and then, if he is slow, touch him lightly a reminder. A few lessons of this kind and he will be prompt about getting away, but not too hasty, as is apt to be the case if he has been started with a severe cut.

It is said that General Harding, the once well known race horse, is to be trained again. As a two-year-old in 1883 he won nine races out of ten starts, among them being the best of the Western stakes.

A telegraphic bid has been received by Senator Stanford offering $60,000 for Arion, 2:10¾, but a reply that was returned was to the effect that $60,000 wouldn't buy one-half of Arion. C. W. Williams, Independence, Io., owner of the trotter Axtell, has offered $25,000 for the privilege of breeding ten mares to Arion in 1893, or in the colt's four-year-old form.

M. Walz, of Perham, Minn., has just purchased of Henry H. Budzett, proprietor of the Prospect Hill stock farm, Long Prairie, Minn., the three-year-old registered Percheron stallion, Apollo, 9710, sired by Burg 4444 (2241), dam Favorite 4436 (4296), by Avanta 1963 (912). Consideration, $1,500.

It is beginning to look as if the kite-shaped track will frown down on all of the croakers. With the world's records for stallions and mares, as well as the one, two and five-year-old records of the world, it is in the swim to an alarming extent.

There is a true ring to a race record. It is one of the kind that carries with it the stamp of merit, and paves the way to future success. When a horse has a race record, and carries it as a winner and not by a scratch, he can be considered one of the right kind.

It is amusing to read the wants of some people. A Minneapolis man has advertised for a pair of young horses that will road twelve to fourteen miles an hour. He won't find them in a hurry. A first-class roadster is about as scarce an article as belongs to the entire horse kingdom.

Gen. Wellington, the brother to Sunol, who has been making a season in Kentucky, recently became standard by performance, trotting to beat 2:40, and doing the distance in 2:30 flat. As Woolsey, another brother to Sunol, is the sire of one of this season's 2:30 performers, the dam of the California filly is entitled to rank among the great mares.

Perhaps the greatest race of the year was the 2:28 contest at the meeting at Saginaw, Mich., won by Prodigal, brother to Patron, 2:14¼. It has gone on record as the fastest seven-heat performance ever seen, and no more stubbornly fought battle ever took place between trotters.

Lady Suffolk was the pioneer of the 2:30 list, and entered the charmed circle in 1849. In the forty-two years that have intervened 2:30 has been beaten by 4,613 trotters and 1,251 pacers. The old gray mare is without descendants.

The market appears to be far from supplied with coach horses of the best class. Coach horses, matched or otherwise, bring prices that pay well their producer. It is from among the trotters that the choicest in this line are now obtained.

Beatrice, the dam of Patron, 2:14¼, and Prodigal, 2:17¼, is now not only the dam of a pair of the fastest trotters credited to one mare, but also the dam of the fastest pair of stallions in the produce of any mare.

The transfers of horseflesh are estimated to amount to $2,000,000 in Vermont the past year, and horse raising now takes precedence of all other animals in the Green Mountain state.

NEW SILVER COINS.

They Will Be First-Water Beauties in All Essential Particulars.

Patterns Decided On by the Directors of Uncle Sam's Mint.

The Very Delicate and Careful Work Done by the Designer.

Making the Models and the Dies--Turning Out Silver Coins.

Washington Star.

Silver change of new design will soon jingle in the pockets of the people. Patterns for the quarters, dimes and fifty-cent pieces, as they are to be, have been practically accepted by the treasury department. Some alterations of detail remain to be made, but they are trifling. A Star writer saw yesterday medallions representing the faces and backs of these coming coins. They were in plaster of paris, and each twelve inches in diameter, being casts from originals in wax produced by the engraving force at the Philadelphia mint.

Permission to examine them was only given on condition that no description whatever should be given in print of the designs. All that can be said here, therefore, is that they are very beautiful. The reverse, which like the obverse, will be the same for all three coins, is a novel conception, and most strikingly artistic. Both back and face have met with certain minor criticisms, although in the main they are highly approved at the treasury. In order to ascertain whether these criticisms are good ones, Director of the Mint Leech has ordered fac-similes of the medallions to be made in Philadelphia with the alterations suggested. The latter will be duly compared with the others, and a choice will be made finally in accordance with what is judged to be the best.

Making the Models.

It was only by making these medallion models on so large a scale that it was possible to secure the exquisite fineness of execution in the dies for the coins. The designer first mixed a quantity of beeswax with a certain proportion of resinous gum and a small quantity of the best vermillion, melting them together and combining them thoroughly by stirring. Gum is essential for giving the material a harder consistency, while color renders it easier for the artist to see what he is producing. Next he poured out the mixture into cold water, and when it was cold kneaded it like dough until the ingredients were mingled into a homogeneous mass. Then he drew on a slate an outline of the medallion to be made, and within it built up a disk of the thickness desired.

On this disk he executed on a large scale a relief model of the face or back of the coin. The work was done mostly with little tools of boxwood, but it is quite usual for an expert in this line to grow one of his thumb nails very long and employ it in delicate portions of his task. It is a sensitive organ of touch, and often will express his intention better than an instrument that has to be held. In delineating hair a brush of fine bristles serves best to give the effect.

When the original model had been produced in this way an electrotype was made from it in metal. The plaster images shown by the director of the mint were merely reproductions of such electrotypes. From the electrotypes the die for the coin is made by a very simple process. A machine does it with infinitely more accuracy than human hands could. The contrivance is on the same principle as a "ountograph" for drawing. While a blunt point is guided by the hand over every curve and sinuosity of the medallion, another point tipped with a diamond and rapid revolving gnaws away the surface of a steel disc precisely the size of the coin that is to be. The mechanism is so arranged that the diamond point grinds out on a small scale an exact reproduction of the medallion. Whatever is coarse in the latter becomes beautifully fine in the diminished copy.

Making the Dies.

Of course, this little copy in steel is in relief, like the medallion—in fact, a cameo. The die must be an intaglio. Therefore, the cameo, which is of hard metal, is laid upon a piece of soft steel, and the two are squeezed together with an enormous pressure. When they are taken apart the design is impressed perfectly in intaglio upon the soft steel. It only remains to harden the latter by tempering, and the die is already for use. Each "blank" of silver as it is turned out at the mint—a simple disk of the requisite size—is placed beneath a huge stamp. On the under side of the stamp is the die for the obverse of the coin, while on the "anvil" is the die for the reverse. Between the two the piece of money receives in an instant the treasury imprints which make it good for about 25 per cent more than its material is actually worth at present market rates for silver.

As soon as the medallions now in the hands of the director of the mint have been fully approved they will be at once returned to Philadelphia and reproduced in the shape of dies. This will not require many weeks, and so it may be expected that within a very few months the new quarters, dimes and fifty-cent pieces will be circulating throughout the country as small change. One will necessarily find more satisfaction in spending these beautiful coins than is to be derived from squandering silver pieces of the present unlovely designs. No models will be attempted at present for the new dollar piece that is contemplated. Mr. Leech prefers to wait a while and find out how his first effort takes with the people.

Turning Out Silver Coins.

The process of turning out silver coins from the raw material is a very interesting one. At the mint the metal arrives directly from the mines through the United States assay offices. It is first disolved in a big tank with nitric acid, precipitated from which in a pure state it looks like so much plaster of paris. Pressed into thick round blocks, it goes to another room to be melted in black lead crucibles among hot coals. Incidentally to the melting 10 per cent of copper is mixed with it, such being the proportion of that baser metal in all United States coins. In a molten state the precious fluid is poured into iron moulds, from which it comes out in the shape of bricks

These bricks, rendered pure by the processes described, are sliced into thick strips, which are rolled thinner and thinner until they are precisely the thickness of the coins required. Then the strips are passed beneath punches, which rapidly punch out of them discs that are destined to be pieces of money. Each punch cuts out 100 dollars or 200 dimes every minute. The blanks thus made are washed and then milled, the latter process simply giving to each coin its raised edge. Next they are softened by being heated red-hot in an oven so that they may receive properly the impress of the dies.

Eighty Coins a Minute.

Finally, on coming out of the oven, they are stirred with scoops in a chemical bath, from which they are shoveled into a cylinder full of sawdust, looking white and just like so many celluloid poker chips. After being revolved in the cylinder they are beautifully bright and shiny and only remain to be stamped with Uncle Sam's designs. The dies strike off eighty coins a minute, printing both sides at once, and, at the same time, corrugating the edges prettily. Women with deft fingers feed the blanks to the machines, which automatically dispose of one while they receive another, dropping the completed coins into boxes beneath. All that is left to be done is the counting of the money, which is performed with marvelous celerity by girls, who think nothing of reckoning the pieces at the rate of $3,000 a minute.

STILLWATER NEWS.

The Snow Storm the Only Unusual Event.

All claims against the new steamer Atlanta, levied on by Sheriff Marty, were promptly settled Saturday night, and the steamer departed for the lower Mississippi, breaking through the ice in Lake St. Croix.

M. H. McCarthy, of the Standard Lumber company, Dubuque, has returned to this city from a trip to the pineries in the vicinity of Sand creek and Kettle river. Mr. McCarthy, in conversation with a GLOBE representative, stated that the company which he represented lost in the neighborhood of 15,000,000 feet of logs by the timber fires last summer.

Yesterday was an unusually quiet Sunday in this city, a show storm raging all day. Fully three inches of snow fell.

Mrs. Clara Gish's juvenile class in elocution will give a recital at Grace Congregational church to-morrow evening.

The non-commissioned officers of Company K met at Capt. Bronson's office Saturday evening and decided to open the new armory Thanksgiving eve. The festivities will consist of a concert and dancing.

The grand jury, which meets to-morrow, will have a very small number of criminal cases to consider. The petit jury convenes a week later, and will have about 125 civil cases to dispose of.

A meeting of residents of this city will be held at the city hall this evening to consider the matter of establishing a board of trade in this city, also to raise Washington county's share of the world's fair fund.

Fully 300 men left for the pineries the past week.

George Horn, a driver on one of the electric street cars, had his right hand taken off this evening in the gearing of a car.

DIFFERS WITH THE MAJOR

A Minneapolis Citizen Calls McKinley on Tariff Agitation.

To the Editor of the Globe.

I notice in a recent reporte I interview with Maj. McKinley, the doughty major is quoted as saying that "he is convinced that the judgment of our citizens does not approve of the constant agitation of the tariff issue in the face of the fact that it can accomplish nothing." Now, as an humble citizen of this great commonwealth, I beg to differ with the major and will in as few words as possible try and place the points upon which I am at varience with him in the shape of logical facts. In the first place, the constant agitation of any question of great national importance is absolutely necessary to educate the mass of the people up to the point of seeing wherein the proposed change would be beneficial to them. In the next place, the major is aware of the fact that the false idea of "protection for American interests" would not stand the test of public discussion, and the transparent fallacy of such a system of taxation of the many for the benefit of the few, would only be too apparent if properly presented to the critical eye of the average American citizen.

The only hope of Democratic success, and the only fear the Republicans have of defeat, is the constant agitation of this great issue. The question of tariff tax must be kept before the people, and constantly presented to them in a new and stronger light (the opinion of Maj. McKinley and many of his political colleagues to the contrary, notwithstanding), and the great question of tariff tax and war duties that add 60 per cent to the cost of the bare necessities of every laboring man's existence should be agitated, discussed and debated in every school room and every home in America, until the people rise up in mighty force and sweep this iniquitous and unjust measure from the statute books of this country. FRANK W. ELLIOTT.

Minneapolis, Nov. 13.

St. Albans Street Kids.

To the Editor of the Globe.

A few of the residents of St. Albans street who have occasion to frequently use the interurban line to and from Minneapolis and intermediate points, wish to inquire through the columns of your paper why it is that patrons of the line are not allowed the privilege of boarding or getting off cars at their own street; but, contrary to all reason, are obliged to go or come a block either way. The question being a public one, and so much inconvenience has been caused, we think it high time to have the matter explained or rectified in some manner. SUBSCRIBERS.

A Bath in the Stain-Tub.

Chicago Tribune.

Simon J. Forhan—I heard a good story the other day at the Shufeldt distillery. John Fitzgerald, of that concern, told me. John is superintendent out there. A man named Casey came here from Ireland and was given a job at the distillery. It is often the case in distilleries that old barrels have to have new staves put in. In order to give the barrel a uniform appearance in the way of color the cask is put into a big tub that is called the stain-tub. It is filled with a substance which makes a man turn black in the face to look at. The first day Casey worked at the distillery, after his work was done, he shied his raiment and jumped into this stain-tub to take a bath. The transformation scene that followed in Casey's appearance was ahead of anything I ever saw on the stage, except that only one color was used. His own mother wouldn't have known him had she seen him at a wake. He could have joined any tribe of Indians in the West. The more he scrubbed the more the stain stuck. The only way to get rid of that stain is to wear it off. As this stage came upon Casey he began to whiten in spots, and every time he went on the street he was intercepted by some dime museum agent who to ok him for a freak. Casey is now a prosperous American citizen, but his friends say that he has never taken a bath since the experience I have related.

He had one other experience after that, at the same distillery. By some mischance the bung was missing from a keg of gin, and the contents were running out. Casey could find nothing to stop the leakage, so he concluded to put his mouth over the bunghole until some one came to his relief with a stopper. As no one came for a while, and Casey was afraid to let go, he got fuller than the frequently-slandered goat and was carried off hors de combat.

"Senatorial Courtesy."

Chicago Tribune.

An "old-timer" Washington correspondent was the center of a lot of congenial fellows at the Leland last evening, and as a Tribune reporter stood near he caught the following: Twenty-three years ago Kentucky was represented in the United States senate by a big man with a bald head so monstrous and so free of hair that you could see it a mile away, undoubtedly. His name was McCreery. His colleague was Garret Davis, who could hardly kick the beam at a hundred. Now, it seems that one day Davis, who was as blue-blooded a Southerner as then lived in "Old Kaintuck," was waiting for a turn at the senatorial washtubs, when out from one of the rooms walked Hiram Rhodes Revels, the new negro senator from Mississippi, looking as glossy as an off-colored piece of mahogany. Davis was just rising from his seat as the door opened, when he fell back into his chair and gasped, "G-r-e-a-t G-o-d!" McCreery, who never looked cheerful in the senate, got wind of this occurrence and told it with variations and exaggerations. It at last came around to Davis himself with all of McCreery's felicitous touches; and, although the classic old man was piqued, he made the best of it; and one day in the presence of a big crowd, including Matt Carpenter, Sumner, Jim Nye, Yates, Anthony and McCreery, an allusion was made to the sousing of the senatorial limbs of the new member from Mississippi, when Nye exclaimed: "That was a mean trick for McCreery to play upon you, Davis." "Yes," drawled the Kentuckian, "almost as mean as that of the nigger barber when he asked McCreery if he should part his hair in the middle or dress it a la Pompadour."

Common mares should rear mules, as there is a paying demand for them at profitable prices, while common horses are little wanted.

DIED.

DOYLE—In St. Paul, Saturday, Nov. 15, at 3 p. m., John Doyle, aged sixty years. Funeral from family residence, No. 218 Commercial street, Tuesday, Nov. 18, at 8:30. Service at St. Mary's church at 9 o'clock. Friends invited.

For Funeral Carriages, $2: Hearse, $4. No. 284 East Ninth st. E. W. Shirk's. Telephone, 455-2.

ANNOUNCEMENTS.

DR. HALE, LITT'S GRAND OPERA House Block, fills teeth without pain.

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Wedding Rings and Wedding Gifts at J. E. Ingham's, 327 Jackson street.

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To-Night, Tuesday, Wednesday and Saturday Nights, INDIGO. Thursday Night and Saturday Matinee, NANON. Friday Night, THE GONDOLIERS.

Popular Prices: 25c, 50c, 75c and $1.

Next Sunday—Charles Dickson in INCOG.

GRAND!

JOHN C. RICE IN A KNOTTY AFFAIR.

Universally pronounced the Cream of All by a Delighted Audience Last Night. Praised on every hand.

NEXT SUNDAY—"THE BURGLAR."

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Forty Thousand Dollars to Loan!

In sums to suit, at

LOW RATES!

On unimproved city property.

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We, the members of The Board of Health of the City and County of San Francisco, cordially approve and recommend the Royal Baking Powder. It is absolutely pure and healthful, composed of the best ingredients of the highest strength and character.

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San Francisco, August 5th., 1889.

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NATURAL FRUIT FLAVORS.

Vanilla, Lemon, Orange, Almond, Rose etc.—Of perfect purity. Of great strength. Economy in their use. Flavor as delicately and deliciously as the fresh fruit.

WOLFF'S ACME BLACKING

USED BY MEN, WOMEN AND CHILDREN.

A SHINE LASTS A WEEK.
LEATHER PRESERVER.
A HANDSOME POLISH.
IS WATER-PROOF.
20c. A BOTTLE.

1 cent a □ foot will pay for changing the appearance of old Furniture so completely that it will look like new.

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Piso's Remedy for Catarrh is the Best, Easiest to Use, and Cheapest.

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Sold by druggists or sent by mail. 50c. E. T. Hazeltine, Warren, Pa.

New Clothes Without Money.

"We can always have new clothes without buying them, thanks to Diamond Dyes," writes a correspondent of the Ladies' Journal.

These reliable Dyes are great money savers, and have helped many a woman to come out in new clothes at small expense. They are true to name, color anything any color, and are very simple to use.

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