

American Watches

Diamonds

Jewelry

Mail orders solicited and will receive our best attention.

Our seven representatives are now in their respective territories with a larger and better stock than we have ever shown before:

Our customers will appreciate this when they look through the line. Dealers who are not customers may wish to see it. A word from you may enable us to send our traveler to you. If this is impossible, we can send goods on memorandum if you will indicate what you would like to see.

We shall hope to serve you through our travelers or by express.

Hayden W. Wheeler & Co.
2 Maiden Lane, New York



If you come this way this Summer, it will pay you to step in and see what we are showing for next season.

If you sell **Table Ware** you must see ours, or you will not be up to date.

If you handle our glass you will have something everybody knows about.

It is no trouble to sell **Dorflinger** glass, and you can safely recommend it.

C. Dorflinger & Sons

36 Murray Street, New York

New York Letter.

All good New Yorkers are taking care to explain that the big fire last month, which resulted so disastrously, destroying several steamships, several hundred lives and millions of dollars' worth of property, occurred not only in another city, but in another State. Indeed, it is hardly likely that a catastrophe of anything like such magnitude could occur in this city, where the fire department is better organized, better equipped and of far greater strength and efficiency than it is in Hoboken. It is with these facts in view that the Cunard and other steamship lines have continued to dock in New York, although at a much greater expense than they could have done on the other side of the Hudson. Our wooden piers, in place of the stone docks which obtain in European cities, are certainly dangerous and unsatisfactory, but they have the protection of the finest and best fire department in the world.

Some business men of this city are making an effort to secure a change in the present rule by which the government does not print anything in the nature of an advertisement on stamped envelopes. The government will print the name and address of purchasers of stamped envelopes in lots of 100 or more for a nominal price, but the rule against advertisements is construed so strictly that the mention of the business in which the person is engaged is forbidden. The business men who favor the change say that the government should print a business card of reasonable size. The argument made by them is that the stamped envelope is a real necessity. When envelopes enclosing circulars are sent out in large quantities some will be overlooked and stamps will not be put on, and the circulars will be lost for lack of postage, which is due sometimes to the falling off of the one-cent stamp hastily affixed by the clerk.

The railroads forming what is known as the Southwestern Passenger Bureau, having jurisdiction over the roads in Texas, Indian Territory and Oklahoma, have declined to grant the application of the Merchants' Association for reduced rates from the territory in which they operate. The roads in the Trunk Line and Central Passenger Associations, having jurisdiction as far west as the Mississippi River, recently granted the reduced rates. The Merchants' Association sent William R. Corwin, of its office staff, to St. Louis to argue before the railroads in favor of similar rates being granted from the Southwest to New York. In that railway association it only takes one vote to negative a proposition of this kind. That vote was cast. The application was therefore denied. A meeting of the principal houses doing business with the Southwest was called at the rooms of the Merchants' Association. They unanimously authorized the Merchants' Association to take such steps as it deemed best to get trade from that territory. The Southwestern roads have all granted a series of dates on which reduced-rate tickets will be sold to St. Louis, but declined to grant the rates to New York.

L. Stuss & Sons received last month one of the largest consignments of marble statuary that has been received in this port for a good while. It included 500 packages of Italian marble busts, figures and groups of various sizes in both Castellina and Carrara marble. The consignment included both classic and modern designs, the latter rather predominating, as the modern designs are more in demand at the present time. The Castellina marble with the glazed finish formed a large proportion of the shipment. Among the figures were a large variety of pedestals, mostly of white marble. These are coming into use again and the demand for them is larger than for several years past.

A new wrinkle in the way of ministering to the comfort of patrons has been inaugurated by E. Kahn & Son, wholesale opticians, at their saleroom, 32 Maiden Lane. They have installed a carboy of plain soda water enclosed in a neat wood chest, from which all callers can quench an ever-present thirst on these hot days. The idea was first started by some of the leading cigar dealers on the Lane, and soon became so popular with their customers as to lead to the adoption of the scheme by Kahn & Co. The expense is not great and the idea might be adopted elsewhere to good advantage.

Walter J. King, of the Julius King Optical Co., leaves in a few days for Chautauque, where he owns a cottage and his family spend the summer months. Dr. King, his father, has been a visitor to the cottage for a month or more past, enjoying a good, long rest. Walter will only remain the usual vacation season.

R. H. Davidson, Springfield, Mass., and J. Krasak, Schenectady, N. Y., were among the retailers, shopping and sightseeing in this city last month.

Bernard H. Blank has just started on a two-months' trip to the Pacific Coast with a line of optical goods and opera glasses for Hammett, Riglander & Co., New York, visiting the jobbing trade only. Chicago will be his first stop and all the large cities across the continent will be visited during the trip. This is Mr. Blank's first trip in nine months, the longest layoff he has had for fifteen years, and no doubt his reception will be all the more hearty from his many friends who missed his usual spring visit.

The out-of-town Jewelers who expect to visit this city to purchase Fall stock, will be pleased to learn that the Merchants' Association's request for reduced rates for visiting buyers has been granted by the Central Passenger Association and the Trunk Line Association.

The Central Passenger Association covers the territory west from Buffalo, N. Y., and Pittsburgh, Pa., to the Mississippi River including Chicago and St. Louis; south to the Ohio River, but including Northern Kentucky, and north into Canada. The dates for which the reduced rates are granted are August 4th to 8th, inclusive, and August 24th to 29th, inclusive. The rate of fare will be one fare and one-third for the round trip; the return limit on each ticket will be 30 days from date of sale. The general terms and conditions will be the same as those heretofore governing similar concessions.

The Trunk Line Association covers the section of the country lying east of Buffalo, N. Y., Pittsburgh, Pa., Wheeling, W. Va., to the New England boundary, and south to the line of the Ohio and Potomac rivers, including Baltimore and Washington. The dates from Trunk Line territory are August 25th to 29th, inclusive, and September 1st to 4th, inclusive.

A. Thoma, of the firm of Thoma Bros., wholesale material and tool dealers, of Cincinnati, Ohio, spent a part of last month in this city, buying a fresh stock for the new jobbing business the firm has recently opened at Cincinnati. He reported the prospects in the new field as exceedingly bright. The firm is not a stranger to the Western trade, and the members are known as bright and enterprising young men of tried integrity.

The Jewelers' McKinley & Hobart Club, which passed 5000 men in the business men's parade in 1896, did not dissolve. President Joseph B. Bowden called the executive committee of the club together and it was unanimously voted that headquarters should be immediately secured and active work among the jewelers of the country commenced at once. Two large flags will shortly be hung to the breeze in Maiden Lane and John Street, inscribed "McKinley and Roosevelt," at which time prominent speakers will address the trade. As in 1896, noon meetings will be inaugurated and a thorough canvass will be made, covering the entire jewelry trade of the city and adjoining States. The officers of the club are: Joseph B. Bowden, president; Charles L. Tiffany, first vice-president; Charles F. Wood, treasurer; O. G. Fessenden, chairman executive committee, and John L. Shepherd, secretary.

Among the foreign buyers in this city last month were Oscar Mueller, an enterprising young jeweler of Opheim, Prussia, and Jeweler Richards, of Barbadoes. Both merchants do almost their entire buying in this market. While here they made their headquarters with the Spencer Optical Co., whose goods they handle largely.

Wm. I. Rosenfeld, the watch jobber, leaves town early these days for Edron, the fashionable watering resort, where he has a cottage. There is a superior attraction, however, to even the advantages of a well-ordered summer resort in the person of a Miss Rosenfeld, who joined the family circle recently. Although not a smoker himself, Mr. R. keeps a box of a well-known brand of cigars on tap for friends extending congratulations.

Prof. A. Mayer, one of the oldest opticians in this country, met a violent death in this city recently by being run over by a cable car at Ninety-second Street and Columbus Avenue. For a number of years Prof. Mayer has done refractive work at the jewelry store of Mrs. Lynch, 1 Union Square. Previously he was a member of the firm of Stern & Mayer, who did a wholesale and manufacturing optical business at 41 Maiden Lane. Many years ago he was engaged in manufacturing optical goods at Hartford, Conn. In all, he had been engaged for about forty-five years in the trade. He previously traveled considerable and was well known in all sections of the country. He leaves a widow and four children, one son being engaged as the traveling representative of the American Spectacle Co. of this city.

Treasurer John Spencer, of the Spencer Optical Co., spent the month of July with his family at Blue Mountain Lake, in the northern part of the State. For a number of years he has resided among the hills of New England, but decided on a change this year for variety. The wholesale material houses report an exceptionally good trade during the past few weeks, for this time of the year. Just why this is so they can hardly explain. One dealer, H. B. Peters, stated that July was the best month his firm had this year for their Star brand spectacles. While all the dealers did not report trade quite so heavy, all expressed satisfaction with the month's showing.

Wolf Green, of the firm of Green Bros., took a well-earned vacation last month, spending a fortnight at Atlantic City, the well-known Jersey coast resort, which has of late years become quite popular with New Yorkers. He returned well bronzed by old Sol and reported having a pleasant sojourn.

A. Marschutz, the veteran optical traveler, spent last month in this city and in short excursions to neighboring pleasure resorts. The "Julius" represents the Spencer Optical Co. in the Middle Western States and reported his spring business ahead of last year's. After lying in a fresh line, with a number of new novelties added, he started out again a few days ago for the fall campaign. During his stay here it was noticed that his two weaknesses, love of a good story and pride of his distinguished nephew, Charles F. Prentice, are as manifest as ever.

The well-known jewelry house of Benedict Bros., 171 Broadway, has been incorporated under the laws of this State. The directors are: Read Benedict, Charles F. Benedict and James V. Burkman, West New Brighton; Edwin P. Benedict, Montclair, N. J., and Frederic P. Benedict, Jersey City. Of the directors, Read Benedict has been the head of the firm; Chas. F. Benedict is his son and James V. Burkman is his son-in-law; Edwin P. Benedict and Frederic P. Benedict are brothers of Read Benedict and were members of the old firm. This house is one of the oldest retail watch and jewelry establishments in the United States. It was founded by Samuel W. Benedict, who started in a modest way on the corner of Maiden Lane and Broadway in 1819, removing two years afterwards to Wall Street, corner of William, where the present Custom House now stands. About 1843 he removed to No. 5 Wall Street, nearer Broadway, where he continued the business, retiring in 1860, leaving his business to his sons. During the Civil War, in 1863, the sons removed from Wall Street to their present location in the Benedict Building, corner of Broadway and Cortlandt Street.

The official reports show that the imports of precious stones during the fiscal year ending June 30th last were: Cut stones, \$10,027,072.94; uncut, \$4,057,037.61; total, \$14,084,110.57, a decrease of \$1,011,601.37 as compared with last year. This decrease is attributed to the disturbance in the diamond market consequent upon the South African war and the rise in price. There has been a scarcity of rough diamonds, but a marked increase in imports lately.

(Continued on page 775.)

THE STRAUS AMERICAN CUT GLASS

Dealers who wish to carry a line of American Cut Glass of the highest standard will be best suited by buying the STRAUS Cut Glass. It gives satisfaction to the most fastidious customer.



WHISKEY JUG. 586-125.
"Goldemar."



DECANTER. 610-129.
"Nonpareil."

Here are a few Reasons why:

Absolutely perfect.

Excellent color,
Clear crystal and
Brilliant finish.

Exquisite workmanship.

Every piece a leader.

Quick seller and
Good profit-producer.

Originality in designs of
shapes and cuttings.
It has many imitators
but no equals.

No fancy prices.

We have just introduced
nine entirely new cut-
tings and a large num-
ber of new and original
shapes.



VASE. 406-129.
"Fiancée."



BOWL. 877-127.
"Norma."

L. STRAUS & SONS, Manufacturers
42, 44, 46 Warren St., New York
Factory, 59th Street and North River, New York



Crepe Paper for Window Decoration.



A SUBSCRIBER who informs us that in his small town he is often unable to procure the manufactured "crepe" paper now so extensively used for decorative purposes, asks us as to a possible and easily procurable substitute for the genuine article. In reply we would say that if our correspondent has sufficient leisure and deftness of hand he can make for his own use a fairly good imitation of the crepe paper of commerce. A sheet of any good, firm tissue paper can be transformed into "crepe" by folding in small plaits across the sheet and then gently rolling between the hands.

To be more definite, fold a sheet of tissue paper into folds about $\frac{1}{4}$ " to each fold, as shown at Fig. 1. There is no necessity of observing great care in the folds being even, as this does not materially affect the crepe effect. The sheet is then gathered into a bundle so the plaits run lengthwise of the bundle as shown in Fig. 2, where



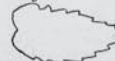
f represents a tissue paper bundle. The "long wad" of tissue paper is rolled between the hands for some time when innumerable tiny folds will be established giving that crepey look which adds so much to the appearance of paper for decorative purposes.

For plain effects pure white is very desirable; but any color of tissue paper can be "creped" in the manner described. Those who crepe their own paper have scores of advantages over those who buy the ready-made article, especially in flower decorations, as they can stain their paper before creping it in a thousand fanciful ways. For instance, in imitation of halsam and petunia blossoms, paper can be "blotched" by sprinkling with a solution of No. 40 carmine in strong ammonia, and afterward diluted with water, from intense red to pale pink. This is done before creping.

Greens for leaves can be variegated by means of diamond dies, from grass-green to a blotched brown edge so much like nature's handiwork. Such color is best applied with a broad, flat brush like that employed with letter-copying presses. The colors can be splashed on the paper in almost any careless fashion, and a combination of green, brown, yellow and autumn-red and gorgeous leaves stamped from the sheet as will be explained later on. Striped petals for a great variety of flowers can be made by quickly decided strokes of a small pencil brush of red or brown sable, well filled with pink madder color mixed with water to the proper shade.

Cutting out of petals and leaves can be much expedited by means of punches very simply formed by taking a piece of thin, old French clock spring,

Fig. 3



annealing it, and filing one edge sharp. Such pieces of the spring are bent to the forms shown at Figs. 3, 4 and 5 for cutting out the crepe tissue to make flowers.

To fit up the cutters so they can be used to advantage, lay the sharp edge down on a piece of very soft pine board, and placing a flat plate of metal on the bent spring drive it down into the wood as shown at Fig. 7, where *a a* represents the bent spring, *L L* the pine board; *a' a'* the portion of the bent up spring driven into the wood, and *D* the heavy metal plate laid on the spring on which we pound to force the bent spring into the wood. The top of *D* is struck with a hammer or mallet. The cut shown at Fig. 6 is a plan of the board and bent spring and accessories; and Fig. 7 a vertical section on the line *b b* of Fig. 6; in this cut the dotted lines at *a' a'* show approximately how far the spring is driven into the wood.

After the spring is secured, temporary pieces of board are placed about the spring *a a*, as shown at *B*, and melted soft solder or old type metal is poured in (after removing *D*) to fill the space *F*, Fig. 7, up to the line *f*. As soon as the metal cools it is removed from *F* with the edge of the bent spring *a* protruding. To use this device for cutting out petals, etc., the soft solder or type metal back is laid on a flat, heavy plate of iron, the paper to be cut out is spread over the sharp edges of the bent spring and a block of soft wood, presenting the end of the grain, placed on the paper, when the block is struck with a mallet. The plan will be understood by inspecting Fig. 9, where

G represents the iron plate; *F a* the spring cutting-out device, *e* the paper and *H* the block of soft wood. Fig. 8 shows the cut-out paper bent up to the cup shape of a flower, *d d* showing the petals seen edgewise.



Fig. 6

The form of petals cut out by the cutter shown at *a a*, Fig. 6, can be utilized for many flowers; but one particularly beautiful and striking effect is to fashion a camelia with the petals cut from pith (some call it rice) paper, and place in the center a fairly incandescent electric lamp of about two candle-power.

Such lamps, white and colored, and the batteries to run them, can be had at little cost in any electrical supply house. Not only tissue paper can be cut out in this way, but heavy glazed paper, a dozen thicknesses at a time. For producing a dead white appearance on white flowers a thin coating of white of an egg is applied with a brush and rice flour dusted on. Such rice flour can also be colored by aniline colors dissolved in alcohol; dried and then dusted on the same as for white. A frosted, glittering look can be produced by "spraying" the flowers with an atomizer and dusting on "frosting," which is made by blowing up the purest white glass into minute fragments. The material placed in the atomizer is white of egg diluted with twice the bulk of water.

Flowers like the camelia we suggested, with the petals cut out by the die shown at Fig. 6 are "built up" by placing several thicknesses superimposed, but arranged to come alternating as shown at the dotted line *g*, Fig. 6, form a perfect double flower. For stems, white cotton-covered magnet wire (stained to suit) is the best. The wire is of soft copper and stays bent in any position; and the cotton coating enables us to attach leaves with book-binders' glue (equal parts of dissolved glue and flour paste) in every conceivable way.

A Unique Window Display.

A window display of rare attractiveness is shown below. It is the show window of the Alsted Kaestner Co., Milwaukee, Wis., and the exhibit therein is the magnificent banquet silver service presented by the State of Wisconsin to the battleship of that name. It consists of thirty-five pieces, comprising a large punch bowl, a small punch bowl, two large trays, two ladles, twenty-four punch cups, a centerpiece, two compotiers and two candelabra.



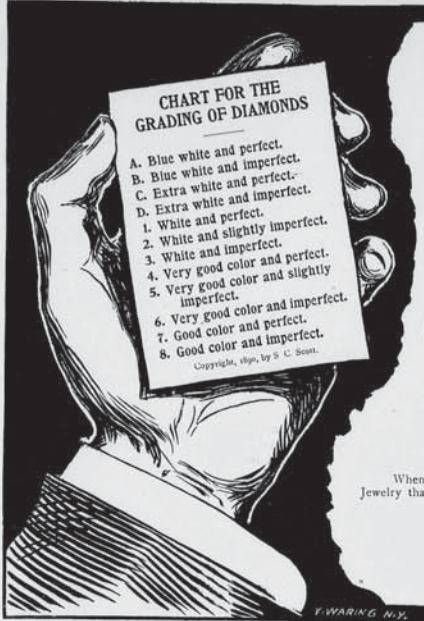


CHART FOR THE GRADING OF DIAMONDS

- A. Blue white and perfect.
- B. Blue white and imperfect.
- C. Extra white and perfect.
- D. Extra white and imperfect.
1. White and perfect.
2. White and slightly imperfect.
3. White and imperfect.
4. Very good color and perfect.
5. Very good color and slightly imperfect.
6. Very good color and imperfect.
7. Good color and perfect.
8. Good color and imperfect.

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REMEMBER

our system of grading Diamonds. It guarantees them to you and so enables you to doubly guarantee them in a way that helps to secure the confidence of your customers. More than

\$1,000,000

worth of Diamonds have been sold under our system of grading Diamonds, and we have yet to hear of the first case where a dealer was compelled to take back a diamond sold under our guarantee. We carry a large assortment of

Single Stone Diamond Rings,	\$5.00 and upwards.
Diamond and Fancy Stone Rings,	5.00 " "
" Brooches,	5.00 " "
" Studs,	3.00 " "
" Scarf Pins,	3.00 " "
" Ear Screws, Ear Drops, Link Buttons, Lockets, Etc.	

When you have a prospective sale for anything in Diamonds or Diamond Jewelry that you do not carry in stock, please favor us with a trial order.

S. C. Scott Mfg Co

9-11-13 Maiden Lane, New York

T. W. ARING, N.Y.




Office and Salesroom
38 Murray St., NEW YORK
Factory, MIDDLETOWN, CONN.

BUYERS OF CUT GLASS: We desire to call your attention to the fact that intelligence in regard to

AMERICAN CUT GLASS


is based upon a knowledge of what is NEW and DESIRABLE.



"GLENWOOD"
No. 1002. 15-inch Vase



"ROSEDALE"
No. 176. 12-inch Whipped Cream Bowl



"GLENWOOD"
No. 508. Quart Decanter

Dealers often ask themselves the question, "Where can I get a line of Cut Glass that is up to date in the matter of NEW SHAPES, ARTISTIC DESIGNS, BRILLIANCY OF FINISH, and withal to be MODERATE IN PRICE?"

We answer: We have a forty-page treatise of the Cut Glass subject in the form of a NEW CATALOGUE which will give this information. It is an illustrated talk, and every article shown has its quota of interest.

The number of NEW SHAPES and DESIGNS in

BERGEN CUT GLASS

will surprise you. We will send this Catalogue "J" upon request, and to every dealer it will prove a valuable handbook. This line can be seen at the show rooms of

THE J. D. BERGEN CO., 38 Murray St., NEW YORK

ELECTROTS FURNISHED FREE FOR ADVERTISING

New York Letter.

(Continued from page 771.)

The Merchants' Association have mailed to all merchants in the State of Texas a circular announcing that the Southern Pacific Co. has made a reduced rate of a fare and one-third from all points on its lines in Texas through to New York, for the benefit of merchants desiring to visit the New York market to purchase their goods. The Southern Co. operates a line from El Paso through the entire State of Texas, together with numerous branches reaching to other parts of the State.

Merchants desiring to visit New York City for the purpose of purchasing their goods in this market, can avail themselves of a reduced rate to Old Point Comfort, Va., via the Seaboard Air Line and all of its connections. The Seaboard Air Line, since the first of July, controls and operates, in addition to the parent line, the Georgia and Alabama and the Florida Central Peninsula R. R. companies. This enables them to make a direct through reduced rate to Old Point Comfort from all points on the lines of these roads, as well as on the lines of the original Seaboard Air Line system. This rate is about equal to one fare and one-third for the round trip. Tickets are on sale daily at all points on the enlarged Seaboard Air Line system up to September 1st. They are good to return until October 31st. In connection with this, the Old Dominion Steamship Co., whose boats ply daily between Old Point Comfort, Norfolk and Portsmouth, Va., and New York, both ways, has on sale a special ticket for the round trip costing \$12.00, including meals and stateroom, good to holders of Seaboard Air Line tickets on presentation of the return coupon issued by the latter company. These Old Dominion tickets are limited in accordance with return limit on tickets from the interior. Full particulars of all these special excursions can be secured by addressing the Merchants' Association of this city.

Charles Jacques, manager of the clock department of Bawo & Dotter, called for Europe last month. He will be absent about two months, during which time he will visit the leading clock factories abroad and purchase the latest productions for the coming season.

A Keffir clergyman who visited this city last month said that before his departure the three brothers of Green Bros. material jobbers of this city, were safe at Buford, Minn., in the Transvaal. They were engaged in stockpiling and mining, as before the war, but had been cleaned out of their stock and other goods by the Boers. Naturally, the brothers here felt much relieved to learn that they were safe and at home, after the uncertainty of the past six months as to their whereabouts and condition.

Wm. Elias, manager of the tool and material department of the Cross & Beeghlin Co., returned from Europe last month. The trip occupied six weeks and the interesting points of Belgium, Germany, Switzerland and Paris were visited. Two days were well spent viewing the Passion Play. It is necessary for visitors to spend at least two days in the village. Mr. Elias was fortunately assigned to the residence of the director of the play, whose two daughters also take part. Mr. Elias relates that the girls would set aside their costumes and in their usual peasants' dress would assist in their regular household duties between the morning and afternoon sessions of the play. The conversation in the home about the site lights and by-plays of the great play naturally greatly interested the visitors.

Speaking of the Paris Exposition, Mr. Elias thinks it a great show and fully up to expectation, especially from the artistic point of view. The electrical display was, he thought, far ahead of the Chicago Fair and the finest that has yet been shown, as was to be expected, as great advances have been made in things electrical during the past few years. In comparing the United States Building with those of other nations, Mr. Elias said it impressed him as being too small and not at all imposing. There was an impression in Paris, he said, that some one had fattened his pocketbook out of its construction, as it showed up poorly little French, Mr. Elias expressed no trouble in the matter of language, and, taken altogether, he was much pleased with the recollection of the trip as a whole.

Among the out-of-town visitors last month was Miss Ellis Bradford, stenographer of the Howard Sterling Co., Providence, R. I. The fair visitor spent a week or more visiting friends and taking in the innumerable attractions of the city and nearby resorts. Tall and stately, with a wealth of golden hair, Miss Bradford made a striking appearance even in this big city.

Acting on the advice of his friend, John Taylor, of Kremenetz Co., E. Dinger, Jr., of the Graham Manufacturing Co., has located his family at Summit, N. J., for the summer, going out and in daily himself, excepting during his vacation time. It is reported that these two old cusses of the Eastern circuit, Philadelphia, Baltimore, Washington, etc., are having great success in the evenings and Saturday half-holidays over that mighty game, croquet. At present it seems there is but little danger of Mr. Taylor losing the championship he has held for several seasons.

Bawo & Dotter have been making improvements in their clock and stationery department. After a thorough going over by the decorators, new fittings were added and some changes in the arrangement of the goods, that adds greatly to both the appearance of the department and the facility of examining and selecting goods.

Hugo F. Keller, the enterprising and successful head of the well-known material house of L. H. Keller & Co., was married on June 21 to Miss Annette Marie Rogers, an accomplished and popular young lady of this city. The marriage was a quiet one, only the friends of the happy couple being present at the ceremony. Immediately after the event Mr. and Mrs. Keller left for a brief sojourn in Lenox and the other beautiful resorts in the Berkshire Hills. Since their return to the city congratulations have been showered on them. Mr. Keller, who is a young man, is one of the most popular members of the wholesale trade. THE KEYSTONE joins its readers in extending congratulations.

The traveling corps of C. G. Alford & Co. recently started out on their first fall tour of their respective territories. John W. Steele, the veteran and dean of jewelry traveling salesmen, with a continuous service of close to fifty years on the road, was the first out, as becomes his station. The veteran gets restless at headquarters and generally gets off a week or so before there is really any need for starting. He looks for good business in his far South territory this fall and was anxious to get out and test the situation. As usual, he will cover South Carolina, Georgia, Alabama, Mississippi, Louisiana, Tennessee and Texas. His son, J. W., Jr., known as "a chip of the old block," assists his father in covering some of his States, besides looking after Virginia, North Carolina and Kentucky. Oliver S. Clark will visit his friends in New England and New York; D. W. Cook, the Middle States; H. C. McConnell, another veteran, the West and Northwest. The only new face in the group is Henry Colyer, who takes his brother's place in the Eastern States, the latter meanwhile doing duty at headquarters as salesman.

Contrary to their usual custom of closing down during part of July, Larter, Elcock & Co. are now running all their hands in their factory at Newark, N. J. They are compelled to do this to meet the large demand they are having for their products. They expect to run from January to January without a break. This is an unusual experience in the manufacturing jewelry business.

Mrs. Minnie Gattle, the mother of Emanuel M. Gattle, retail jeweler, Broadway and Twenty-seventh Street, and also of Moses and Hyman Gattle, of Gattle, Ettlinger & Hammel, 68 Nassau Street, died July 11th. The deceased was sixty-six years of age.

In the compilation of statistics for the fiscal year ended June 30th, some interesting figures are under the head of exports of watches and parts of watches. We find that in 1895 our exports of watches and parts of, amounted to \$337,391; in 1896, to \$539,980; in 1897, to \$804,491; in 1898, to \$771,012; while in 1899, \$818,810 worth of these goods were exported. This shows very satisfactory and promising progress.

Sylvester J. Battin, Jr., of Newark, N. J., has been missing from his home for some weeks and the police are looking for him. Battin is the son of Sylvester J. Battin, president of the Manufacturers' National Bank of Newark. He was the employer of J. Strasburger Sons & Co., of Maiden Lane, and is charged by that firm with embezzling some \$10,000 worth of diamonds, which it is believed he pawned or sold, appropriating the proceeds.

Post Office for Foreign Mail. Postmaster Van Cott's plan for a branch post office building, to be used exclusively for the handling of foreign mail, has been formally adopted by the department at Washington, and their commendations contained in the report of the investigating commission will be at once put into effect. The commission visited the city a few weeks ago and with Postmaster Van Cott inspected a half-dozen available buildings on the North River front. None of the buildings were considered adequate, and the commission finally accepted the postmaster's suggestion that a building be erected for the purpose in view at the corner of West and Morton Streets. The report favors this plan, and a two-story and basement building of fire-proof construction after plans prepared by the Post Office Department architects will be erected. It will be ready for occupancy, the postmaster hopes, by the end of October. The building will be especially adapted for the rapid handling of large quantities of mail. The building will cover 15,000 square feet of ground. It will be located in close proximity to the foreign-mail steamship piers, and to the Christopher Street ferry, where the mail is landed from the continental lines having their piers in Hoboken and Jersey City. The ground floor will be a single large room into which the mail wagons can be driven and unloaded without the necessity of using elevators or of blocking up the streets and sidewalks. This single big working room is one of Postmaster Van Cott's ideas which he wishes to incorporate in the plans for the new general post office he is trying so hard to secure. He believes much more work can be done in such a building than in one constructed on the lines of modern office buildings. The construction of this foreign mail post office makes it possible to try the experiment on a small scale. All the foreign mail will be handled in the new building. The change will remove about 300 clerks from the general post office to the new branch. At present the men work in three turns of from 7 1/2 to 100 men each, a majority of them in the hot, ill-ventilated basement. Their removal to the new quarters will greatly relieve the congestion at the general post office and make available additional floor space for the use of the city department. The city delivery service, as well as the foreign mail service, will therefore be greatly benefited by the change.

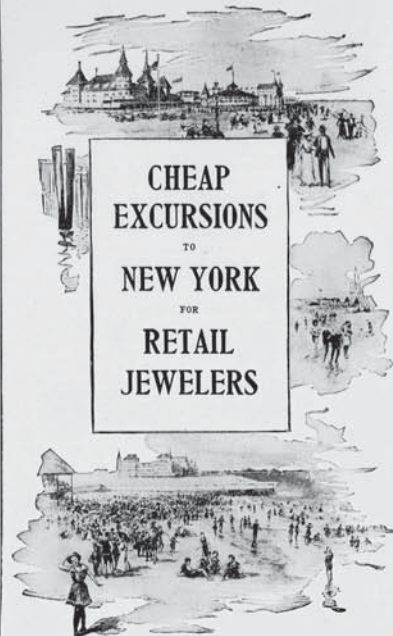
M. J. Averlock recently gave a pleasant outing to his salesmen and heads of departments. The party bled them to Manhattan Beach, and the pleasures of the day concluded with a dinner at the Manhattan Beach Hotel.

A meeting of the general salesmen of houses selling goods in the South and Southwest, held in the rooms of the Merchants' Association, induced the association's efforts to open that territory to New York trade. These present pledged themselves to try to induce buyers of goods from those sections to place their freight in the hands of the association for home-routage, that the association might forward it by the lines which have succeeded the efforts to bring buyers to New York.

Among the more or less regular visitors to this city is A. G. Moses, secretary and treasurer of the Trenton Watch Company. For the last few months Mr. Moses has not been seen quite so frequently on the Lane. On being asked for an explanation, as he was recently en route for the New York office of his company, he explained that he was kept so busy with affairs at the main office and factory at Trenton, that he did not find time to visit us as regularly as formerly. He reports an unusually good demand for watches at the present, as brick, in fact, as usually experienced much later in the year, when the fall trade is in full force. Their factory, he stated, has been working on full time and every bench occupied for months past, and the outlook is for the best watch business this year that the companies have ever had. All of which is very gratifying, for such a good trade in such a staple as watches, should have its effect on other lines handled by the jeweler, and generally give tone to the whole trade. Besides his interest in the watch company, Mr. Moses is also an officer of one of the leading lamp and pottery concerns located in Trenton. He admirably fulfills the axiom that it is the busy man who can do the most work.

L. H. Cohen, importer of art metal goods, 14 East Seventeenth Street, was recently appointed assistant judge on the jury of awards for art metal goods at the Paris Exposition.

At the last monthly meeting of the directors of the Jewellers' Association and Board of Trade the following firms were unanimously elected members of the association: S. Buchbaum & Co., Chicago, Ill.; A. G. Schwab & Bros., Cincinnati, Ohio; and J. & B. C. Silver and L. E. Waterman Co., of this city.



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Tickets good for 30 days from date of sale.

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Good Roads for Bad

By THEODORE DRESSER, in FRANKLIN'S MAGAZINE.



THE fact that America has been notorious for its lack of great highways, and the vast network of its crude and periodically impassable roads, has been always excused on the ground that it was a new country and that such improvement could only be expected to come with time. A nation, however, which has in other respects accomplished in years what the older nations have required centuries to perform, cannot hide its iniquities even under so good a cloak. Streams and rivers have been brought to our arid deserts, forests planted, and more railroads, telegraph and telephone lines built than in all the rest of the world combined, yet we have trusted largely to Providence for our roads. This is the more amazing since nothing so directly affects the pockets and the social life of the people, retards or hastens the development of the country's resources, or can be made so ready a source of its prosperity, as good roads. Producers every year, in every portion of the country, are unable to take advantage of the best market prices, and are frequently unable to dispose of their produce at all, because the few miles that intervene between them and the buyer are traversed only by a long stretch of quagmire or sand.

This situation has in the past, and does to-day, constitute the good-road question. It is the subject of a vast agitation, begun first by wheelmen, taken up by the Govern-



BY COURTESY OF UNITED STATES DEPARTMENT OF AGRICULTURE.
Road Improvement in South Carolina. Convict Traveling Camp, Showing the Prison on Wheels in which the Men sleep.

is drawn over it until deep ruts are made, and the surface rendered similar to that of most of our roads during a large part of the year.

When these roads are completed, a heavy farm wagon, loaded with produce, is drawn over each of them, and the amount of force required to haul it is determined by the use of a trackometer. This instrument is so constructed as to accurately register every pound the horses pull at every stage of the haul, in plain view of those in its vicinity.

It is made clear by these experiments that a team harnessed in the ordinary way is a subject, under the best conditions, to a continuous jerking motion, which must, on even the smoothest country road, greatly increase its fatigue. On a dirt road in bad condition this jerking becomes a succession of heavy blows, transmitted to the team by means of the collar. They are cruelly painful, bruising the shoulders, harassing and torturing the animals, continually lessening their value, as well as directly decreasing the amount of the load that it is possible to haul.

During one of these experiments a team of small mules readily drew twelve bales of cotton on a heavy Studebaker wagon up a ten per cent. grade of the macadam road, the trackometer indicating a pull of 1000 pounds. The same team was stalled completely in going down a six per cent. grade of the sand road after pulling the indicator to 1900 pounds. Nine bales of cotton were removed before the load could be again put in motion. The driver refused to venture at all upon the dirt road with the twelve-bale load.

In addition to this lesson, there are many others regularly administered. Thus the Government has had photographs taken showing the exact process of proper road-building, which it exhibits at fairs, expositions and

meetings of all kinds where good roads can be properly talked about. Indeed, the Agricultural Department is a great believer in photographs, and no opportunity is lost to flash a convincing picture before the eyes of the unbeliever. The picture of a road before and after it has been improved is one of the most common kind. That of a horse unable to pull even a light load on a bad road, yet drawing a heavy one on a good road, is also common.

Another part of this Government movement is that of advocating the building of steel-track wagon roads, which is an entirely new scheme, but which has proved a wonderful highway idea. Briefly, it is a system of laying wide steel rails upon ordinary highways. The road thus laid consists of two parallel lines of steel plates or rails, eight inches wide, laid at a sufficient distance apart to receive the wheels of all



BY COURTESY OF UNITED STATES DEPARTMENT OF AGRICULTURE.
Horseless Carriage Propelled by Electricity on a Steel-Track Wagon Road.

ment, and now a matter of legislative consideration the country over. As a result ten States have exhibits at the present universal exposition in Paris, illustrating how perfect roads ought to be built. This from a country that still has, in part, the worst roads in the world is rather daring, but it is also an indication of what is being done. The ten States in question know what they are talking about. They had the worst roads, and now they have (or at least are constructing) the best. The first among these is Massachusetts. The second, New Jersey.

It will be a matter of news to many to learn that the United States Government has gone into the road question in the most energetic and thorough manner imaginable, and having, through the Department of Agriculture, studied out the question of what constitutes a good road, and why good roads are needed, has gone to work to spread the information and teach the people. It has experiment stations in every State in the Union, where lessons in road-making are taught. Hundreds of pamphlets showing just how a good road is constructed and how it may be preserved have been published by the Government, and may be had for the asking. Object lessons in road-building are given annually in every State in the Union, while, in some worst section, a quarter, or half, or even a mile of excellent roadway is constructed, and the people shown how and why it ought to be done. These object lessons, begun in 1894, have done more than anything else to start the great movement which is now furthering the construction of perfect roads the land over.

The Government, in these exhibitions, ordinarily constructs three specimen roads.—a modern macadam, a sand and an ordinary dirt road. Each of these roads is made up of different strata, each stretch of a different grade. The macadam roads are covered to a width of twelve feet with the best quality of stone to be secured at a practicable distance from the locality. The pavement is laid six inches thick, being made of four inches of stone, so broken that the greatest length of any stone is two inches; over this is placed a two-inch layer of smaller stones. The sub-grade or foundation for this stone is made by properly preparing the natural soil of the country. The sand road is made by putting six inches of river sand on a bed of natural clay. Neither the bed nor the surface of this road is rolled. It is the aim to make it similar to the ordinary country sand road. The dirt road is made by grading in the usual manner. It is then thoroughly drenched, and a narrow-tired wagon, heavily loaded,

(Continued on page 778)

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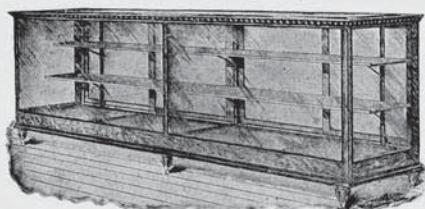


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It is made of quarter-sawn oak, or other wood desired, highly polished, beveled plate-glass top, double strength glass front, ends and doors, has two highly polished shelves or same wood as case, supported by Tom's adjustable brackets, metal legs six inches high, and doors run on steel tracks.

Dimensions:—Length as ordered, 28 inches wide, 43 inches high, upper shelf 12 inches wide, lower shelf 16 inches.

The construction of this case is first-class. It has a nicely molded top, ornamented with egg and dart.

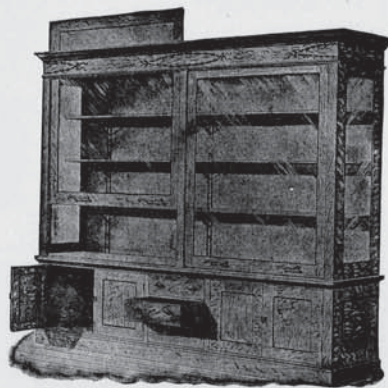
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Net price, \$54.00. Worth \$70.00.

Good Roads for Bad.

(Continued from page 777.)

vehicles of standard gauge. These plates, or tracks, have a slightly upward projecting flange on the inner edge, so as to prevent the wheels of ordinary vehicles from easily leaving the track. At the same time, the flanges, being only one-half inch high, are not of a rise sufficient to prevent vehicles whenever the driver so desires. These steel tracks are not supported by wooden cross-ties or longitudinal stringers of any kind, but are made solid in the road by flanges projecting both downward and outward, which are imbedded in the concrete of the roadbed.

Sample roads of this kind have been built by the Government at Pittsburg; New Lenox, Ill.; Cleveland; Omaha; St. Anthony's Park, Minn.; Ames, Iowa, and other places. The road at Omaha was a part of the Trans-Mississippi Exposition, and was designed as a test of cost, value and utility, as well as an object lesson to the greatest number of people. The road there was eight hundred feet long, and was the scene of a number of interesting daily experiments. One of these consisted of having a heavy load of eleven tons drawn by twenty horses over a common road, which lay alongside the steel-track road, and then having the same load drawn by one horse on the steel-track road. This load was twenty-two times the weight of the animal, and was easily moved with light harness. The load could have been (and was, in one instance, at Ames, Iowa) increased up to fifty times the weight of the animal, and still be started and moved without difficulty.

Another experiment constantly made before the sightseeing crowd was that of a horseless carriage running up and down this track. It was proved that it moved with such ease along this roadbed that it required only a small fraction of the power ordinarily used for working such vehicles. A bicycle was also employed there by the Government to demonstrate what a fine thing such a road would be for wheelmen, and how it would have an important bearing on rural mail delivery. The cost of construction was proved to be only \$3500 per mile in the case of poor roads; \$1500 where a very fair road was already open.

A third branch of the Government's work lies in advocating wide tires. Never was a cause more ardently advocated than this. Hundreds of pamphlets have been issued by the Agricultural Department and distributed all over the country, making clear to the farmers what a fine thing wide tires are on bad roads. The use of the wide tire in Europe has been proved again and again in a thousand ways, and still the Government is not weary of well-doing. It has been shown by experiments in every part of the country that a double team can draw upon an ordinary wagon with three-inch tires just twice as heavy a load as upon a wagon with the usual narrow tires. It has been equally proved that wide tires keep earth roads in order, by constantly rolling them, as it were.

In 1892 the Government instigated a national good roads meeting, which was held in Chicago, and the National League for Good Roads organized. This meeting, which was in itself the result of an awakening interest in certain localities, gave a great impetus to the movement and spread the interest to every State. At that time Massachusetts was far in advance of the rest of the country, and while this State has maintained its supremacy, building more miles of better roads every year than any other State, the knowledge it possessed and the practical results it had accomplished were made common property by this gathering. Many other States had also been experimenting and progressing, and it was found by an exchange of experiences, methods and results, that the efforts of one State could be made to serve all the others. Every mile of good road built serves as an object lesson, and creates a demand for more. There have now been enough of these object lessons stretched over the country to assure a permanent and rapid progress.

Every State has had its own peculiar problems to solve and difficulties to overcome in its progress toward good roads. In the first place, it has been necessary to awaken an interest among the people, to convince them that good roads would pay. It has then been necessary to devise laws by which a successful system of building can be operated, and, finally, nearly every State has suffered from a waste of its money caused by a failure to learn from the experience of others, by lack of organization, by corruption, and carelessness. It is true that good soil and material are not so available in some locations as in others, but it has been

found that all such problems can be solved where the proper efforts are made.

Of all the States, Massachusetts has created a more universal interest among the people, formulated the simplest and best laws, established the best working method, and secured the largest and most lasting results for the money used.

The poll tax was long since abolished. All money expended upon the highways in any shape is raised by tax levied upon the property throughout the State. Massachusetts was the first State of the Union to construct and maintain State highways paid for in this way. A bill was passed which provided for the establishment of a permanent highway commission, and an appropriation of \$300,000 was made for the construction of State highways.

There are in Massachusetts, outside of the cities, 20,700 miles of roads. These roads running throughout the State, through the different cities and towns, are thoroughfares. They are not confined to any one locality. There are roads running through towns perhaps too poor to maintain them, and which the people of the towns adjoining require to be maintained.

These roads, including all grading, cost anywhere from \$5000 to \$20,000 a mile, on a basis of 15 foot macadam. There are no roads less than 15 feet wide, and some as wide as 27 or 28 feet. These \$20,000 roads are through the mountains and are all Telford work. The average cost of model road-building is somewhere from \$6000 to \$9000 a mile.

The Clerk who Makes Friends.

The young man who is making his way through the world, depending upon his energy, industry and intelligence to lift him higher, must not neglect to cultivate the study of mankind. No matter how efficient he may be in other qualities, if he is not a judge of men he is doomed to failure.

A man must possess the faculty of winning the confidence of other men and of making them his friends if he would be successful in any walk in life. This faculty, or gift, is born with some. They touch a sympathetic chord in every one they meet, are given a hearing when more worthy men are turned away, and succeed along their chosen lines when men of immensely greater ability plod along at the foot.

If we say they possess tact, we only half express it. Tact is saying and doing the right thing at the right time to the right person. Tact prevents blunders that would make enemies, but does not necessarily make friends. Tact is the form, but the feeling lies deeper down. To make friends, tact must be present, but the heart only can tie the knot of friendship.

The strength of youth is its unlimited hopefulness. Success is just around the corner; in a few years, at most, she will be overtaken; then come ease and luxury! The great majority of those in the race never catch a glimpse of her robes, and the ones who lag farthest in the rear are those whose manners were so unsympathetic or forbidding that the men who could and would have helped them refrained, perhaps at the critical moment, from saying the word or doing the thing that would have advanced them.

THE SAVING GRACE OF TACT.

I am at this moment interested in a man who is out of work and who is struggling bravely to find a position. When he is not near me I study how I can help him, and canvass friends who may need a man and who would give my recommendation some weight. But when he comes to see me he has not talked five minutes before I begin to think that I wouldn't want him near me all the time; and, feeling so, I wonder if it is right that I should commend him to others. He has no tact. He does not permit me to get half way through a sentence before he interrupts me to agree with me, while he proceeds to finish my sentence in an entirely different way from what I had intended. I conclude that it is not worth while to go back and finish in the way I started out to do, so let it go as he left it, but I do not volunteer any further remarks. When he goes away I still wish as much as ever that he was at work, but I am hoping that he will find a place without my having to make a special recommendation.

Every young man, with the competition of life around him, should probe deep down into his own soul and learn for himself just what is the measure of his capacity to win

the good will of other men. He should be absolutely honest with himself, listening to no flattering tale, but facing the truth fearlessly.

THE VITAL NATURE OF FRIENDSHIP.

I recall another young man who was visiting in a city for a few days and was taken by his host to call upon the head of a wholesale house that he might see how business was done in that busy place. The young man and the merchant talked together for an hour, and the latter drew from the youth the story of his life thus far and his aspirations for the future. That evening the merchant called upon the host, and as he took his leave particularly requested the young man to call upon him in the morning. He then said:

"Some remarks you made yesterday kept repeating themselves to me after you went away. I think you are possessed of the spirit that succeeds. I want a man in my office; if you wish to take hold you may."

The offer was promptly accepted and neither man ever had cause to regret it.

As any man studies his relations with other men, and analyzes the position in which he holds those who must be met in either a social or business way, he must confess that he divides these into two classes: those who attract and those who repel him. There is a small percentage to whom he is indifferent, but the great majority are in the two classes I have named.

A man who intends to succeed must have friends. These are not to be bought or borrowed ready-made; they must be evolved out of the men and women whom he meets both in social life and in business. How shall he do this? I know of no better rule than that given in Proverbs: "A man that hath friends shall find himself friendly." If this was given as the rule by which a man shall keep his friends, much more is it the law to be adopted by which one shall create friends for himself.

The result of the efforts to make friends is no less important to the clerk in the smallest grocery store than to the salesman in the largest wholesale concern. Both rise or fall by their power to please their employers and customers.

WHAT STARTS THE SALESMAN IN TRADE.

When I was my favorite clerk at the grocery I am quite prepared to hear that he has started in business for himself. All who dealt with him liked him; many have promised that if he started for himself they would give him their trade, and have followed him. His capital in friendship is far more valuable to him than his dollars.

The salesman who has been calling upon me for years, and who has won my regard, now tells me he is traveling for himself, having started in business with a partner, and he is certain of my trade to as great an extent as I can give it to him.

There is a class of people who make friends easily, but who do not hold them. If they are traveling salesmen their first trip is usually a good one, but each succeeding trip grows poorer till they are dropped. It does not seem to be because they are insincere, but because they do not wear well. All that there is in them is on the surface.

There are others who are much too friendly in appearance upon short acquaintance. They ask about trade with such gravity of tone as if they had come these hundreds of miles to get the answer to that one question. You feel that they are acting a part, and you are not complimented that they should think that you are deceived by it.

THE DOLT WHO NEVER GETS ON.

By far the larger portion of mankind can think only of themselves; the *I*, with them, is so extremely large that they spend most of their thought and time in efforts to impress the world with a proper sense of their fancied importance. A person belonging to this class can never forget himself long enough to take an interest in his auditor. He not only lacks tact, but he is wanting in common sense.

The interest that makes friends must be both kindly and honest. The clerk and salesman must forget himself; must think only of the one purpose, to make the person his friend. This is not accomplished by fawning upon men, nor by echoing their opinions, but by an intelligent acquaintance with human nature that pushes one's self into the background and sees and brings out the best in others. He must follow out the injunction laid down for keeping friends and "show himself friendly."

—William H. Maher, in *Saturday Evening Post*.

Dynamos.

(CONTINUED.)

XI.

Field Magnet Winding.



AFTER the wooden form shown at Fig. 43 of our last preceding article is adjusted to the proper size, it should be covered with paraffined paper, the same as grocers use for wrapping rolls of butter in, in order that we may apply shellac varnish to each layer of wire as it is wound on the form. After the proper amount of wire is on the form, it is removed from the lathe and placed in an oven heated to about 150° F. It is not well at first to raise the temperature of the oven up as high as the boiling point of alcohol, as such course would cause the shellac varnish to bubble and exude from the winding. After the alcohol has all evaporated the helix and winder should be heated up to about 250° F. to fuse the shellac and firmly unite all the coils of wire.

The stability of the helix we are building can be greatly enhanced by placing a layer of thin cloth between each course of wire as we wind it on the wooden form shown at Fig. 43. To aid description we reproduce at Fig. 46 a portion of Fig. 43 cut out to the dotted line A.

To repeat a little of our instructions we first cover the channel formed by the end pieces C' C' with paraffined paper to prevent the shellac used from cementing the helix fast to wood, and to carry out the extra secure winding referred to at the commencement of this paragraph, we provide a strip of thin, but strong, muslin (cheese cloth will answer) and cut strips of such cloth of a width double the space between the pieces C' C'.

If the reader will refer to Fig. 33 he will see that the combined length of waist of our field magnets is 5", and consequently the half of such length would be 2½", as the space between the ends C' C'. Of course, we allow a little freedom in order that the iron forming the two halves of the waist will not be helix-bound, but come firmly together. Hence we cut our strips of cloth 5", and at each edge cut in slashes 1¼" in length as shown at Fig. 47, where D represents the cloth



Practical Field Winding

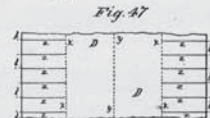


Fig. 47

and z the slashes. The plan of the winding is: The wood form is first covered with paraffined paper to prevent the shellac from attaching the helix to it. To aid in our explanation we refer to Fig. 48, which is a view of Fig. 43 seen in the direction of the arrow I. In preparing such wood spool as is shown at Fig. 48 for winding on the insulated wire, we first cover the wood waist B and then the inner faces of the ends C' C' with paraffined paper, as before directed.

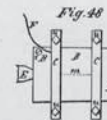


Fig. 48

To aid in applying such paper an adhesive material composed of beeswax and Canada balsam can be used. The exact component parts will depend on the temperature of the weather and state of fluidity of the balsam. The idea of the composition is to temporarily hold the paraffine paper until the helix is wound.

We next cut a piece of the cloth shown at Fig. 47 to such length as will just go around the waist B, Fig. 48, and the ends come together on the line w. These edges are sewed together with ball-cover stitch. The narrow pieces of cloth formed by the slits z will now protrude radially, and to get them out of the way for winding the helix it is well to attach these loose ends to the pieces C' C' with the mixture of Canada balsam and beeswax, which should hold well, but yet allow the ends to be pulled loose without tearing the cloth. The cloth between the ends C' C' is gone over with shellac varnish of about the consistency of thin molasses, and while yet soft the wire is wound on, making the coils lie as close as possible. Such winding is best done in a screw-cutting lathe, setting the feed to coincide with the thickness of the wire.

For holding the inner end of the wire it can be passed through a hole in the end piece C', as shown at F, Fig. 48. If additional security for the end of the wire is desired it can be wrapped around the screw head shown at s, Fig. 48. After one layer of wire is wound on the waist B the free end (that is, the one extending to the spool on which the entire wire for the helix is wound), is temporarily attached to the spool head C', and the radiating free ends of the cloth temporarily cemented out of the way, are folded back over on the coils and secured in place by some of the shellac varnish. By cutting the cloth D as shown at the dotted lines I, the ends will lap past alternately. A little practice in making and using this balsam paste will enable the workman to accomplish a great many desirable results.

A second coat of shellac varnish is applied to the folded-over ends of the cloth and enough applied to saturate the cloth and cotton insulation of the wire. It is well to let the varnish dry for an hour or two and then apply another layer of cloth and shellac as before, on which is wound a second course of wire as before, repeating the operations until the requisite number of layers of wire are in place, and then the ends of the thin cloth are folded down as before, and the outside wound with a layer of harnessmakers' twist. After the final baking the wedge r, Fig. 43, is removed; after which the parts B' B' and C' C' separate and come out of the helix, and the loose paraffine paper is picked off. A helix made in this way is nearly as solid as a block of wood. One of these helices is placed on each of the waists A', Fig. 33.

When what is called compound winding is desired, we can make the helices for our magnets a little shorter, say 2", which will leave a space of an inch between the two; in this space is placed a third helix wound with coarse wire through which the entire current generated by the dynamo passes. The theory of compound winding would require too long a consideration for this series of articles, but we will give our readers such data as will enable them to work out the length of wire to produce the compounding desired.

It is a common practice in this day to place on the waist or waists of dynamos, in the progress of construction, a temporary helix, or helices, and from some source outside of the dynamo send

through such helix or helices a sufficient number of amperes to excite the field to cause the armature at a given speed to yield a current of the desired voltage, say 55 or 110 volts. This policy gives us the key to the quantity of current required to excite the magnetic field of our dynamo. Suppose we found that we had to send through the temporary helix of 1000 coils a current of 1.2 amperes to get sufficient magnetic intensity to cause our armature to give 55 volts. We wind our field with such length of wire as to permit 1.2 amperes to pass through it at 55 volts pressure.

(TO BE CONTINUED.)

"The Keystone is too near perfect for me to offer any new suggestions."—H. L. Prichard, jeweler, Fort St. Louis.

Passing of the Dark Room in Photography.

Professor F. E. Nipher has recently made an interesting study of the development of photographic plates, the results of which seem to indicate the passing of the dark room in the near future, says the *Electrical World*.

Any plate on which no impression has been made in the camera may be developed into either a positive or into a negative, the former in a light room, the latter in a dark room. The experiments of Professor Nipher appear to show that what are usually called overexposed plates yield the best positives, and short exposures the best negatives.

A plate which will take a sunset scene in a second or less may be exposed for four hours if desired, or for one minute, and may be developed in the light of an incandescent lamp five inches or six inches to two feet or three feet distant with superb results. If the picture fogs, it needs more light. The same is true with X-ray plates and pictures.

A positive and negative picture necessarily implies a zero picture, and Professor Nipher is now endeavoring to fix the illumination of a plate in the developer, in order that a zero plate may result for various exposures. This is what the photographers call a fogged plate. They have always supposed that if too much light in a dark room gave a fogged picture in which nothing develops, that a still lighter dark room would give more fog. The experiments of Professor Nipher, however, show that it gives less, and that the positive in the light room is just as clear and beautiful as the negative in the dark room. It follows that if a similarly satisfactory solution of the printing can be effected, so that a positive can be printed from a positive plate, the dark room will be eliminated from photography.

Playing False to His Client.

"I shall have to make a lawyer out of that boy of mine. I don't see any other way out of it," declared the well-known attorney, with a laugh. "He came into my office the other day on his way home from school and laid a nickel down on the desk before me.

"What is this for, son?" I asked.

"Retainer," he answered, soberly.

"Very well," said I, entering into the joke. "What have I been retained upon?"

"My boy dug down into his pocket and produced a note from his teacher and placed it before me without comment. It was to the effect that he had been 'cutting up' and advised a whipping.

"Now what would you advise?" asked he in a businesslike voice after I had read the note and saw the trap that the young rascal had set for me.

"I think that our first move should be to apply for a change of venue," said I.

"Very well," he answered, "you're handling the case." "Then we will turn the note over to your mother," said I.

"I saw the young imp's face fall at this, but he braced up and said:

"See here, pop, you're bound to see me through on this 'cause you've accepted my retainer, you know!"

"I'll argue your case before the Court," I answered, "but you will have to accept the decision. I would not dare to attempt to influence the Court."

"Well, I pleaded the boy's case, promptly had it thrown out of court, and the boy got what he deserved—a good whipping.

"It was the first time I ever played false to a client."

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NEW COUNTER SHOW CASE.

Glass top, sliding way.
Containing our famous FOUNTAIN
PENS, assorted, plain, chased
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Special No. 1, plain and chased, assorted, \$8.00 per dozen, net cash.
We make twenty-five different styles of Holders, handsomely chased and
ornamented with gold mountings. Send for prices and discount to the trade.
Our **STYLO PENS** have also been a great success.
Send for catalogue. Export trade solicited.



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Why not enter for this work, Mr. Jeweler, as an adjunct to your regular business? There is money in it.

When desiring upon a line of Samples to carry, remember that ours is right up-to-the-minute. In every particular—the kind of a line that will bring you the orders. In quality inferior to none. Our prices are right, too. Before we make a sample offer.



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Stationery.

Making Gold Pens.

Gold pens are now regarded as a profitable part of the staple stock of the average jeweler. It will interest the trade, therefore, to know the various processes in their manufacture as recently told by George P. Gaydon, gold pen manufacturer, at 17 John Street, New York City:

The gold "999 fine" is received in bars, and the iridium for pointing in heavy glass ounce bottles. The latter costs about twice as much as gold. After amalgamation the gold is turned out in sheets. These are rolled thin and put under a punch, which cuts them out in pen shapes, but flat. The blanks are then put under a stamp that makes a flat space or recess at the point just where the "diamond point" of iridium or platinum is to be swamped or soldered on.

In the next process the workman lays a lot of the blanks on a plate. The specks of iridium are taken up on a small pencil brush, which is previously dipped from time to time in liquid borax, and set into the recess previously made in the point. The workman uses a jeweler's monocle, or eye-glass, to enable him to place the points.

The next man is equipped with a blow pipe and a jet of gas. He takes the tray or plate of pen blanks, and by the use of his blow pipe sweats or solders on the iridium point. This is done by melting the gold immediately contiguous to the iridium until it holds it like a setting. This is work requiring great delicacy, as a moment too long will melt the entire pen. The point is now applied to the copper lap and the point brought to a square, even face on both sides; it is then ready for the blank rolls.

With this machine the gold pen is rolled down, or by heavy pressure stretched out to its proper length and made the proper thickness. The point is not rolled, being protected by a recess in the rolls. An expert workman then takes each pen and, on a small anvil, hammers the nib of the pen to give it the proper elasticity, so that the nib can be bent double and returned without damage.

The pens, being now of an uneven shape, are given the proper shape by a second cutting or die press. This operation takes off a narrow strip all around the pen except at the point, and gives the shape necessary for the final rounding. It is then ready for the stamping press. The name that is to be impressed on the pen is on a steel die, and with this machine is pressed into the top of the pen.

The next machine brings the gold pen into its proper rounded shape. As yet the pen is not split. This delicate operation is performed by a slitting lathe. With this the slit is cut through the point, and as far up the pen as desired. The delicacy of this work is shown by the fact that the workman's eye is the only guide to the straightness of the slit. The slit is left very wide open and is wrought together by manipulation of the workman's thumb nail and fingers.

The pen then comes to the grinding lathe. A thin disk makes the inside edges of the slit perfectly square, and another grinding surface rounds and smooths the iridium point to the proper evenness for writing. This work requires the most skilled workmen in the trade.

The final process is the polishing of the pen, which is done on fast revolving wheels covered with felt charged with rottenstone or polishing material. The pen is now "nibbed" on the in-

side-of the nibs to roughen it so that it will readily hold ink. The grinder then takes it again and touches it up with great care and after cleaning up with camels cloth, it is ready to go to the trade or to the fountain pen manufacturer.

A heavy item of expense to a gold pen manufacturer is the "waste." It is estimated that the various grinding, polishing and cutting operations cause a loss of not less than fifteen per cent. Every particle of dirt in the shops is cleaned up and put away, and by careful manipulation as much as six per cent. of the waste is usually recovered.

Invention in the Stationery Field

The large army of rulers has received a further addition in the shape of a flexible steel one. The same is, of course, flat, and the side which rests on the paper is provided with a strip of India rubber which prevents its gliding about.

A most handy little article, which is likely to soon find its way into every office and study, is the blotting stump. It very much resembles the crayon stump, and its claim to the position of a useful stationery article is in every way justified. In spite of all the patent inkwells which make it impossible to overcharge a nib, the treacherous old inkpot still holds the sway. Ink blots are often the consequence of this ill-advised conservatism. If taken up with the blotting paper at hand they are frequently only flattened out. Many people, therefore, tear little pieces off their blotting paper, which thus becomes of a ragged appearance, and the required end is thus attained at a sacrifice. The blotting stump is either made from the pulp as a solid stick or it is cut out from boards consisting of several layers of often differently colored sheets, or it consists of rolled paper. As soon as the point has become saturated, a new one can easily be made with the scissors by any one.

Another useful and rational invention is a new book mark. Unfortunately it requires a slight alteration of the book cover hitherto employed. It consists of a hand similar to that of a clock, which glides up and down in a slit, which has to be cut into the portion of the cover extending over the side of the pages. Being made of thin and easily bending metal, the hand is pushed to a position opposite the line where the reader has left off, and then bent down. There is a simple arrangement to prevent the hands from being accidentally moved out of position. I should think that any firm of booksellers or bookbinders taking up this new idea would soon find eager buyers for books thus fitted.

Pencil sharpeners have hitherto had a great shortcoming which much interfered with their popularity. It either required a double process to remove the wood and to produce a properly pointed graphite, or the latter appeared short and stumpy if sharpened under the same angle as the wooden portion. One of the new sharpeners is fitted with two knives. The one, a rigid strong blade, shaves off the wood without touching the graphite, while the other one has to shape the latter into a long point. For this purpose it is formed like a section of a watch spring, and being flexible the graphite will not break off, even if the pencil should not have been inserted quite straight. Upon the angle of the sharp end of that spring-

like knife depends, of course, the length of the point. The second new sharpener cannot boast of any improved construction of its essential parts, and all the advantages it offers consist in its being a combination of point protector and sharpener.

Like many other things, sponge basins have their failings.

If they do not contain enough water they are of no use, and if there is enough it frequently proves to be too much. A new ingenious contrivance has, however, just appeared in the market which, I believe, is attributable to an American inventor. It consists of two portions, of which one fits upside down into the other. The outer one looks like a large ordinary round basin, or like a flower pot saucer, but with vertical sides. It is rather difficult to describe the second part without having recourse to a drawing. However, I believe the reader will understand me if I represent it as a ring made of a very wide piece of tubing, which has been halved in such a way as to produce two grooved rings. From the inner of one of these rings a little has been removed, and after having been filled with water, the basin is placed over it upside down, whereupon the two portions are lifted up together and placed on the table in the right position. Thereupon only a limited quantity of water will enter the basin in the center of the ring, where the sponge is placed, as a partial vacuum is produced inside the ring by the outflow of the water. The latter only trickles forth in the same proportion as the liquid in the central portion is being absorbed.

A great many inventions have already been made for the benefit of those afflicted with the writer's cramp, but new contrivances are continually being thought of. The latest is a double ring, or rather a strap of metal bent similar to a sign of interrogation; the lower and smaller ring thus formed is passed over the penholder and the larger one over, the first finger.

An eminent scientist has recently said that only paper handkerchiefs and napkins should be used, and then burn them when done with. This will kill all disease germs which are liable to spread by linen which is used until worn out. A handsome set of paper napkins has just been brought out. They are made of silky white paper, but are bordered with pictorial representations of different spots printed in color. They are tasteful and cheap.

The Lesson of the Hour.
From the mercantile agencies we gather that the last year was one of the most prosperous, from a business standpoint, on record, whilst the number of failures and the amount of liabilities were correspondingly small. This is an encouraging exhibit for which we have reason to congratulate ourselves, but we should be careful not to allow the present situation and hopeful prospect of the future to induce extravagance and careless business habits.

A conservative course is always safe to follow, whether in prosperous or dull times, and we know of no greater error than to take advantage of the present rush of business to extend credits. We have fallen on good times; there is plenty of money—more than we know what to do with—and there is abundance of work and good pay for the masses, and experience proves that when the working classes are so favored they are apt to spend freely. In such circumstances the danger lies in extending credit beyond the conservative line; and our advice is, "don't do it," unless you feel that you would do it if the times were less prosperous than they are now.

THE NEW ENGLAND WATCH CO.

WATERBURY, CONN.

TO THE TRADE

We are advertising extensively this fall and we are distributing largely our Blue Book, showing all about ladies' watches, and our Red Book, showing all about men's and boys' watches.

These all direct purchasers to the jewelers. Therefore, keep your stocks well filled and order early. A phenomenal fall trade is before you. We are sold up to our limit on nickel watches, and anticipate the same on ladies' goods before October 1st.

We are pleased to supply you with both the Blue and Red Books with your name on, to give out as a souvenir. They are attractive and taking, and give added interest to your patrons.

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Electro-Metallurgy.

(CONTINUED.)
XXX.

A Resume of the Silver-Plating Process.



SILVER solutions become foul from use from many causes, among which can be named the action of the air on the free cyanide. Exactly what the chemical changes are would be hard to tell, neither is it worth the trouble of investigating. In silver-plating solutions a gray-white precipitate forms, which is easily stirred up and is liable to interfere with the proper silver deposit. To remedy this condition a solution should occasionally be filtered, but the inexperienced workman should not allow himself to get the idea that every time a silver-plating solution goes wrong, *id est*, doesn't work satisfactorily, it needs filtering, because usually a silver-plating bath is a thing of long suffering, and will turn out good work if humored by an experienced workman when in a very bad condition. It is the novice who comes to grief by permitting any of the details to become faulty. For filtering a small bath, say up to fifteen or twenty gallons of solution, a bag made of two thicknesses of brown cotton sheeting, after the manner described in article XXVI, and illustrated at Fig. 1 of that issue, can be employed. A piece of cotton cloth 18" square, after doubling, will be about the right size. The same kind of support as there described can also be made use of.

Filtering Solutions

Such filtering is only useful in a limited degree, as it will not remove the chemical contamination held in solution, as, for instance, we make a plating solution by dissolving the metal direct from the anode. In such case the cyanogen of the cyanide of potassium unites with the metal and the potash is set free, but held in solution and cannot be removed by filtering. Now such contaminations can in no way be of any use, and can in many ways be a detriment, consequently we should avoid them as much as possible.

Plating solutions will sooner or later become sophisticated to that degree that it is not desirable to use them. In such cases the best plan is to remove the metal, which in this case is silver, and throw the rest of the chemicals away. In dealing with chemical matters it is well to understand the chemical actions and reactions which take place in such operations. As, for instance, we are making a silver-plating solution by first dissolving silver in nitric acid, then precipitating the silver as silver cyanide, which, by adding an excess of cyanide, is redissolved. Now, if we add some chemical having a stronger affinity for silver than cyanogen, the cyanogen is set free and escapes as a gas.

Recovering Silver from Old Plating Solutions

In dealing with an old plating bath we add hydrochloric acid which, after first decomposing the free cyanide by uniting with the potash, liberates the cyanogen as a gas. After the free cyanide is all disposed of, the chlorine of the hydrochloric acid unites with the silver, forming insoluble chloride of silver. Practically we add hydrochloric acid as long as any precipitate is formed, which is as long as any gas bubbles are given off. In treating old plating solutions as above the operation should be conducted out of doors, as the gas given off is highly poisonous. All the silver contained in the solution is now in the form of a chloride of silver which can

be changed into metallic silver by the process described for making silver-plating solutions from old, impure scrap silver.

We have now given the keys to all the mysteries of silver-plating by electro-deposition, and it only remains for such of our readers who desire to acquire the art to read carefully until the entire details of the process are thoroughly understood and then carry such knowledge into actual practice. In reading such technical matters it is always well to mark such paragraphs as strike us as being important, and also at the same time make note in a small book of such paragraphs in order that we can find them readily in case we wish to refer to them again. This is particularly important in articles like these where there is no index. It is a fact well-known to all careful readers of technical books that an index so made will contain clues to useful information not to be found in the regular index.

Perhaps we should say a few words more in relation to silver anodes. Such anodes should in all cases be of pure, or as it is termed in the arts, "fine silver," also called .999 fine. Coin silver will in no instance answer, as such silver contains one-tenth of its weight of copper, and would soon ruin a solution. Although fine silver, $\frac{999}{1000}$, can be bought for fairly reasonable prices, still many workmen would like to know how to make fine silver anodes for themselves.

Making Silver Anodes

There are several methods of refining silver conducted entirely by fire, but the detail of them would be too long and intricate for this department, and besides they require long experience and constant practice to carry them out with success. The wet assay, that is, to dissolve the alloyed silver in nitric acid, is described in article XXII. In that description we told how the precipitated silver could be made up into a plating solution; to what we there said we would now add that the silver precipitated by the zinc rods can be melted by employing bicarbonate of soda as a flux.

If ordinary Hessian crucibles are used for melting they should be "glazed" previous to use by dusting them on the inside with borax powder, and then heating them red-hot, which operation forms a borax glaze and prevents the silver from entering the pores of the crucible. The melted silver is cast into ingots and afterward rolled out to the proper thickness for anodes. The hooks which support the anode should also be of fine silver.

(TO BE CONTINUED.)

"The Keystone is great as it is; can't be improved. Pick it up at any time and you'll find something you missed at previous perusal—it's good from cover to cover."
—Martin C. Williams, Jeweler, Trenton, N. J.

"Smoking Glass."

Pat was no astronomer, says the Cleveland Plain Dealer, but next to his pipe he loved to be "up to date." A friend had been telling him about an approaching eclipse of the sun.

That night Pat sat on his door-step, patiently puffing away at his old pipe. He would light a match, pull at the pipe, and then, as the match burned out, try another. This he did till the ground was littered with burnt match-wood.

"Come to supper, Pat!" called his wife from the kitchen.

"Faith, an' Oi will in a minute, Biddy," said he. "Moike has been a tellin' me that if Oi smoked a bit of glass, sure I could see the spots on the sun. Oi don't know whether Moike's been a foolin' me, or whether Oi've got hold of the wrong kind of glass."

The Watches of Senators.

"Do watches indicate the personal characteristics of their wearers?" is a question which is answered in the affirmative by J. H. Jones, the official watch repairer of the United States Senate.

Mr. Jones is known as the "time-and-tide" man of the Senate. It is his duty to tell Senators why they do not get rain in their States when it is needed and also why it does not stop raining when dry weather is demanded by their constituents. He also regulates Senatorial watches.

Some of the finest watches in the United States are worn by Senators. Mr. Hanna has an excellent one. It is modest in appearance, and the Senator does not care much how it keeps time just so that it does not cause him to miss trains. If it is within five or ten minutes of the chronometer he is satisfied. It has an American movement.

Senator Marion Butler, the Populist from North Carolina, is most methodical. He has a watch which he insists shall keep time to the exact second. He daily compares it with the chronometer.

William M. Stewart, the easy-going Senator from Nevada, whose views on the "crime of '73" would fill many volumes of the "Congressional Record," compares his watch with the official chronometer twice or thrice a day. It must keep within five seconds of the correct time or be regulated. His watch is solid gold, worth about \$400, and is considered one of the best in the Senate.

McEnery, of Louisiana, is rather old-fashioned, and so is his watch. He is not particular what kind of time it keeps just so it moves along.

Senator Keam, of New Jersey, has one of the most antiquated watches in the Senate. It is an English make, and evidently an heirloom in the family. It has five or six cases to be opened before the works are exposed. So careful is the Senator of his watch that he will allow no one to handle it but himself. It keeps good time.

Senator Thurston, of "Rose, Sweet Rose" fame, wants his watch to agree to the second with the chronometer. He is a regular attendant to compare the time, and his watch is as neat and methodical as the Senator himself.

Senator Hoar guards his watch with great care. He never permits an alien hand to touch it. It is a good timekeeper.

Senator Beveridge's watch is like himself—nervous and irritable. One day it keeps good time and the next day it is off. He is indifferent as to what kind of time it keeps, and will not permit any one to handle it long enough to regulate it.

Senator Scott, of West Virginia, has a fine watch, presented to him by the clerks of the Internal Revenue office when he was commissioner. It is a good timekeeper and is the apple of his eye.

Senator Cushman K. Davis, chairman of the Committee on Foreign Relations, is careless about the little things, but most exacting in affairs of state. He does not take very good care of his watch, and often permits it to run down.

Senator Tillman does not greatly care how his watch runs. He is satisfied if it does not lose more than ten minutes a day. He compares it regularly with the chronometer, but seldom attempts to change it.

Senator Hawley, of Connecticut, has one of the best watches in the Senate, and it has a Connecticut movement. He regulates it himself, and it keeps time to within a fraction of a second.

Senator Allen invariably forgets to wind his watch, and consequently it is not an extraordinarily good timepiece.

The best watch in the Senate is owned by the Secretary, Charles G. Bennett. He is the most exacting of all, demanding that it agree with the chronometer to the second.

Romances are oftentimes suggested in the opening of senatorial watches to regulate them. Faded flowers, locks of hair, pictures and other mementoes of the younger days of Senators are dropped to the floor, but explanations are never forthcoming.

Advertising Advice.

Do not make the mistake of doing just the things your competitors do and following along in their tracks. Do something different. Get out of the rut.

Try to make your advertising individual. Try to have it reflect your points of superiority and try to make your advertisements stand out above their surroundings.

Put the story of your goods before the public in a straightforward, simple, frank manner, and study out methods of display which will make your advertisements the first things seen upon the pages where they appear.

—C. A. Bates.

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On account of the death of my late husband,
Edward Lee Feyler, I offer for sale

THE JEWELRY BUSINESS LOCATED IN
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(one of the most thriving manufacturing towns in the West), for many years conducted by him. It is well established, the stock is up to date, and this store has always done a paying business. Full particulars given in correspondence.

Address Mrs. E. L. Feyler, Portsmouth, Ohio



No. 127



No. 124

Looking for Hat Marks?

Well, how do these suit you?

THEY ARE MADE OF SILVER ALUMINUM, AND WON'T GET BLACK IN YOUR HAT.

THE PRICE? Only \$1.00 per hundred.

IF YOU ARE LOOKING FOR SOMETHING TO SELL AT A PROFIT, SEND FOR SOME OF THESE HAT MARKS.

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Wait for them—they have the largest line in America to the Retail Trade.

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Subscribers wishing inquiries answered in this department must send a stamped and addressed envelope, and a return address. Questions will be answered in the order in which they are received.

"Inquiring Mind"—Did you not make a slight mistake in your reply to the second question of "Pallet Jewels," on page 157, February, 1900, KEYSTONE, when you say "the force conveyed from the escape wheel to the balance would be slight"? (I notice you did say the power would be the same). Although the escapement shown has equidistant lockings, the power exerted on the fork and jewel pin is not the same in each direction, at the acting face of the exit pallet has so much longer leverage than the entrance pallet. Your illustration at Fig. 4, in the time referred to, shows you must have had the same idea in mind. Please explain!—We made no mistake in the words we used, because the entrance pallet acts with as much force on the balance as the exit pallet, the apparent advantage in leverage which the exit pallet has is only a deflection, and can be compared to the one perpetual-motion inventors set in a wheel where weights go down on long levers and go up on short ones. After answering your allusion to Fig. 4, above mentioned, we will try and show why the power or force conveyed by each pallet is practically the same. The illustration at Fig. 4 was intended to illustrate the fact that a so-called straight line lever had no advantages over one acting at right angles to a line passed through the centers of the escape wheel and pallet staff. In studying mechanical forces and motions we should at the outset fortify our mind with certain truths and axioms, among which we can start with this one fact: Mechanical force, power, effort, whatever you choose to name it, cannot be lost or annihilated. Such force may be badly applied or wasted in friction, but not lost. In this escapement problem the force is derived from the escape wheel, and this force can be derived from any source and the mechanical result is precisely the same. In the present problem this truth is involved in the fact that the escape wheel is a gear, and the mechanical force involved in its escapement problem. Here the mechanical force involved is represented by the tooth of an escape wheel A passing through an arc of 10° . The number of degrees has really nothing to do with the question; the pertinent factor in the problem lies in the question, what is the mechanical equivalent expressed by a weight falling through a given distance to the force of the tooth A passing through this arc of 10° ? Now, you will see the force exerted by the tooth engaging the entrance pallet is the same as the force engaging the exit pallet. The teeth engaging either pallet pass through the same arc, and the force imparted is represented by an equal weight falling through the same space. We show at Fig. 2 an enlarged drawing of the ratchet tooth.



Fig. 1

"Screw"—(1) What is the best method of tempering small drills, screw drivers, etc., made from Swiss steel wire?—It depends a good deal on the quantity or number of the articles to be hardened. If you have a great number of pieces to be hardened a lead bath is about the best device for heating. A lead bath is a vessel of iron or a crucible containing lead heated to full red heat into which the steel articles to be hardened are plunged until red-hot, then removed and immersed in cold water. If only a drill or screw-driver is to be hardened it is a good plan to use a large piece of soft wood charcoal for heating upon. In tempering drills it is important that they should be plunged endwise to prevent springing (distortion). Such springing not only throws a drill out of true but creates a stress or tension on the particles of metal composing the tool which makes it liable to break. In making drills it is well to use a few sizes of wire, even if the drills are to be used in the wire chucks of an American lathe. We will then have no hesitation in selecting the proper wire chuck for holding a given drill. Let us suppose you use a Whitcomb lathe and you employ for making drills wires which fit Nos. 40, 32, 22 and 10 wire chucks. In this way you know at sight what size of chuck you require for holding any given drill. In heating a drill on a piece of charcoal or should have some way by which it is held steady until it can be dropped endwise into water or oil. Ordinary kerosene or coal oil does well for tempering, and will not catch fire any more than olive or lard oil. After a drill is hardened it should be tempered by rubbing it bright with an emery buff, then taking the extreme point in a pair of pliers beat the drill until the point is as hard as a steel color. A cyanide hardening bath is worked very much like a lead bath. For those workmen who use gas, a small Bunsen burner is especially adapted for tempering small drills and other

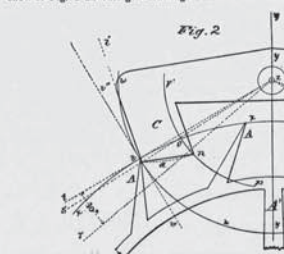


Fig. 2

removed and immersed in cold water. If only a drill or screw-driver is to be hardened it is a good plan to use a large piece of soft wood charcoal for heating upon. In tempering drills it is important that they should be plunged endwise to prevent springing (distortion). Such springing not only throws a drill out of true but creates a stress or tension on the particles of metal composing the tool which makes it liable to break. In making drills it is well to use a few sizes of wire, even if the drills are to be used in the wire chucks of an American lathe. We will then have no hesitation in selecting the proper wire chuck for holding a given drill. Let us suppose you use a Whitcomb lathe and you employ for making drills wires which fit Nos. 40, 32, 22 and 10 wire chucks. In this way you know at sight what size of chuck you require for holding any given drill. In heating a drill on a piece of charcoal or should have some way by which it is held steady until it can be dropped endwise into water or oil. Ordinary kerosene or coal oil does well for tempering, and will not catch fire any more than olive or lard oil. After a drill is hardened it should be tempered by rubbing it bright with an emery buff, then taking the extreme point in a pair of pliers beat the drill until the point is as hard as a steel color. A cyanide hardening bath is worked very much like a lead bath. For those workmen who use gas, a small Bunsen burner is especially adapted for tempering small drills and other

of a 16 size watch, the escape wheel of which is .245" in diameter. We measure the thickness of the entrance pallet on the large drawing and find it to be .09". We make a statement in proportion thus: $\frac{.10}{.09} = \frac{.245}{x}$. To work out the problem we will first call the thickness of the pallet, on the pallet in the drawing, an even inch. On working out the problem we find the thickness of the entrance pallet to be .114". We measure the thickness of the exit pallet in the drawing and find it to be .08". And, as before, make a statement and work it out and the thickness to be .114". The size of any part of an escapement can be determined in the same way. The trouble in making a general application of such a rule is the variation in escapements, as, for instance, in the ratchet tooth escapement we have circular pallets and those with equidistant lockings. With the club tooth we have still greater varieties, as, for instance, not only circular pallets and those with equidistant lockings, but also changes in the relative thickness between teeth and pallets—it would be better to say dividing the angular motion between the escape wheel teeth and the pallet arms.

"Lever Escapement"—What is meant when speaking of a lever escapement by inside and outside drop; also as regards being too close inside and too close outside?—In matching an ordinary lever escapement we try the wheel and pallets in this way: Let a tooth of the escape wheel rest on the entrance pallet about as it would in the watch, then swing the pallets around and see if the exit pallet has the proper freedom back of the third tooth from the one resting on the entrance pallet. If the exit pallet shows that it would strike the back of the third tooth the pallets are spoken of as being too wide outside, and demand a larger escape wheel. If, on resting one of the escape wheel teeth on the locking face of the exit pallet, and then swinging the pallets around the inner angle of the entrance pallet strikes the back of the third tooth, counting back from the engaged tooth, the pallets are spoken of as being too close inside and demand a larger escape wheel. Of course, the reverse obtains when we are matching an escape wheel with a pair of pallets. It is evident that if a pair of pallets are too close inside there will be insufficient drop inside, that is, the tooth which engages the entrance pallet will drop through a very small arc before the third tooth, which now engages the exit pallet, will be arrested, and the inner angle of the entrance pallet will strike the back of the tooth which engaged it.

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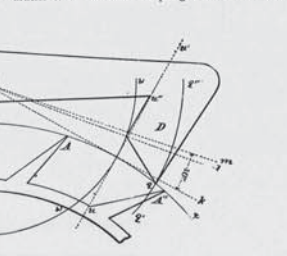


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similar work. Such burners have not for some reason found as much favor with jewelers as they justly deserve. They can be bought, but not usually with all the accessories the jeweler requires. It is a very easy matter to make such a Bunsen burner. To start with we need two pieces of brass tube, one piece to be $\frac{1}{8}$ " and the other $\frac{1}{4}$ " outer diameter. Usually, the smaller of these tubes will exactly fit into the larger one, as the walls of such tubes are generally $\frac{1}{16}$ " thick. This is especially true of seamless brass tube. It is a good plan for a jeweler to buy a couple of feet of each of the sizes named, as such tube is very convenient for many purposes. To make a Bunsen burner we first provide an iron base shaped as shown at Fig. 1, Fig. 1. The part B is cylindrical, $\frac{1}{8}$ " in diameter and $\frac{1}{4}$ " high. This cylindrical part of B is drilled to receive two pieces of the $\frac{1}{8}$ " tube as shown at A and A' . The better plan seems to be to use the pieces of tube into B , but to those who do not have facilities for cutting such screws would say that the holes in B can be drilled through and then touched out with a large taper reamer. The tubes A and A' are then fitted and driven in. The open holes in B are then plugged up. The upper end of A should be partially stopped with a handle of small wire made into a frigate. We show such a handle at F , Fig. 2. About No. 20 wire should be employed and cut to about $\frac{1}{4}$ " in length.

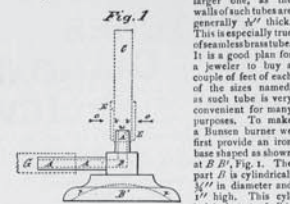


Fig. 1

The idea of this plug in to prevent fire from following up the tube and bursting the rubber hose used for connecting the Bunsen burner to the gas bracket. The dotted outline C indicates the position of the outer tube A'' in diameter and about $\frac{1}{4}$ " long. Just above the plug F in the top of A' are made two openings in the tube C . The position of these openings are opposite the arrows a and a' . These openings should be about $\frac{1}{8}$ " in diameter, and their use is to admit air to the tube C . Still outside of the tube C is a loose tube as indicated by the dotted lines E . This tube also has openings in it to admit air to pass. We show a side view of Fig. 1 as if seen in the direction of the arrow a at Fig. 2. In this cut one of the openings to admit air is shown at the dotted lines E . The idea is this loose sleeve can be turned about on the fourth of a revolution as controlled by the stop pin a . The sleeve E turned one stop pin a will admit air; turned in the opposite direction it will shut off the supply of air. Permitting the air to draw into the holes a and a' is what constitutes a Bunsen burner. The open flame above the tube C , Fig. 3, affords ample heat for hardening small drills. Such drills are heated by holding them in the flame and then plunging them endwise into a lump of follow, or what is better, beeswax. By whatever plan a drill is tempered so as to render it file-hard the temper should be drawn as above directed. The idea is illustrated at Fig. 4. The drill is hardened, and then brightened with an emery buff, next the extreme point at a is clamped with pliers or heavy bladed tweezers up to about the line a' , and then the body of the drill is heated to bring it to a brown or purple, leaving the extreme point a a pale straw color. Drills so made are both strong and hard. In addition to the Bunsen burner we should have an elbow burner shaped as shown at H , Fig. 5. This burner slips on to A' the same as the Bunsen burner, and is especially designed for use with a blowpipe, and is in the proper shape for use as shown in the cut. The gas as it issues from the horizontal pipe IP is lighted at a , and the blowpipe is held at a , and is thrown in the direction indicated by the arrow p .

(2) How does a "compensation" balance differ from a cut "compensation" balance?—They are different names for the same balance.

(3) How is a watch adjusted to temperature?—A watch is provided with a compensating balance, and to different temperatures by changing the position of balance screw. Suppose, for illustration, the watch gains on the falling off of the temperature, we change the position of the balance screw. We follow the position of the balance screw to each other in the rim of the balance—from a position near the arms of the balance to one near the cut end of the segments. We follow the opposite policy if the watch loses by a falling temperature. That is we remove a pair of screws near the cut end of the segments to a position nearer the arms.

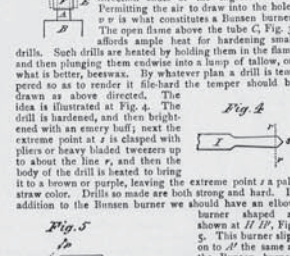


Fig. 2

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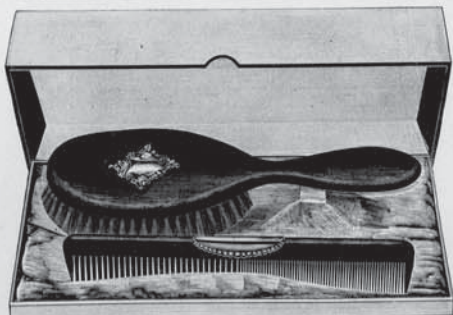
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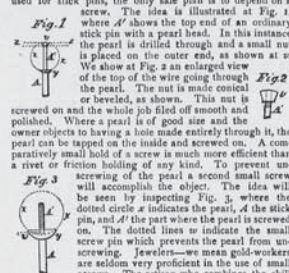
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Workshop Notes.

Subscribers wishing inquiries answered in this department must send name and address for publication, but as evidence of good faith the writer will accept any reasonable amount of postage either by mail or by express. This not only forms a strong cement, but it also preserves the pearls from the deleterious effects of water entering from the back when the jewelry is washed. Drilled pearls can never be safely secured by cement. The original intention for the use of drilled pearls was for them to be strung like beads on either a fine wire or a piece of silk gut. Where drilled pearls are used for stick pins, the only safe plan is to depend on a screw. The idea is illustrated at Fig. 1, where A' shows the top end of an ordinary stick pin with a pearl head. In this instance the pearl is drilled through and a small nut is placed on the outer end, as shown at A. We show at Fig. 2 an inclined view of the top of the wire going through the pearl. The nut is made conical or beveled, as shown. This nut is screwed on and the whole job filed off smooth and polished. Where a pearl is of good size and the owner objects to having a hole made entirely through it, the pearl can be tapped on the inside and screwed on. A comparatively small hole of a screw is much more efficient than a rivet or friction holding of any kind. To prevent the screwing of the pearl a second small screw will accomplish the object. The idea will be seen by inspecting Fig. 3, where the dotted circle x indicates the pearl, A' the stick pin, and A' the part where the pearl is screwed on. The dotted lines x indicate the small screw pin which prevents the pearl from unscrewing. Jewelers—we mean good workers—are seldom very proficient in the use of small screws. The artist who combines the skill of watchmaker and jeweler is chiefly the man to profit by this plan. The screw for the part A' should be about one cut in a No. 2 or 3 with a Swiss screw-plate, and the one which prevents the unscrewing need be no larger than No. 14 or 16 of the same plate. Pearls are a little difficult to hold for tapping, as all kinds of clamps have a tendency to mar or crush anything as frail as a pearl. A little "dodge" can, however, be resorted to, which comes in very handy for holding not only pearls, but also highly polished and unsightly pieces of metal, for drilling and tapping. To make such a device, take a thin piece of brass tube, say 1/8" or 1/4" diameter and 1/2" or 3/4" long. We show such a piece of tube at A'. The tube B has a disk hard-soldered to it at the dotted line x, so that the portion above said line becomes a small dish in which common white wax (bees) wax can be melted so as to fill it up to the dotted line x. The idea is, the pearl or other object to be drilled is placed in the melted wax so as to almost cover it, and then the wax is allowed to cool and hold the pearl or other object to be drilled or tapped.

"Stick Pins."—What is the best cement for fastening half pearls in their settings, also for securing drilled pearls on stick pins?—There is no cement which will securely hold pearls in place. The best cement for this purpose which has come to our notice is made by dissolving celluloid in a mixture composed of three parts of sulphuric ether and four parts of alcohol. This not only forms a strong cement, but it also preserves the pearls from the deleterious effects of water entering from the back when the jewelry is washed. Drilled pearls can never be safely secured by cement. The original intention for the use of drilled pearls was for them to be strung like beads on either a fine wire or a piece of silk gut. Where drilled pearls are used for stick pins, the only safe plan is to depend on a screw. The idea is illustrated at Fig. 1, where A' shows the top end of an ordinary stick pin with a pearl head. In this instance the pearl is drilled through and a small nut is placed on the outer end, as shown at A. We show at Fig. 2 an inclined view of the top of the wire going through the pearl. The nut is made conical or beveled, as shown. This nut is screwed on and the whole job filed off smooth and polished. Where a pearl is of good size and the owner objects to having a hole made entirely through it, the pearl can be tapped on the inside and screwed on. A comparatively small hole of a screw is much more efficient than a rivet or friction holding of any kind. To prevent the screwing of the pearl a second small screw will accomplish the object. The idea will be seen by inspecting Fig. 3, where the dotted circle x indicates the pearl, A' the stick pin, and A' the part where the pearl is screwed on. The dotted lines x indicate the small screw pin which prevents the pearl from unscrewing. Jewelers—we mean good workers—are seldom very proficient in the use of small screws. The artist who combines the skill of watchmaker and jeweler is chiefly the man to profit by this plan. The screw for the part A' should be about one cut in a No. 2 or 3 with a Swiss screw-plate, and the one which prevents the unscrewing need be no larger than No. 14 or 16 of the same plate. Pearls are a little difficult to hold for tapping, as all kinds of clamps have a tendency to mar or crush anything as frail as a pearl. A little "dodge" can, however, be resorted to, which comes in very handy for holding not only pearls, but also highly polished and unsightly pieces of metal, for drilling and tapping. To make such a device, take a thin piece of brass tube, say 1/8" or 1/4" diameter and 1/2" or 3/4" long. We show such a piece of tube at A'. The tube B has a disk hard-soldered to it at the dotted line x, so that the portion above said line becomes a small dish in which common white wax (bees) wax can be melted so as to fill it up to the dotted line x. The idea is, the pearl or other object to be drilled is placed in the melted wax so as to almost cover it, and then the wax is allowed to cool and hold the pearl or other object to be drilled or tapped.



"R. R. Inspection."—A railroad watch inspector told me he would reject a watch which timed as follows: pendulum up, 1 second slow; dial up, 10 seconds slow; dial down, 7 seconds slow. I would like to know the exact requirements for railroad tests.—We think many railroad inspectors have rules of their own. We believe it is generally required that a watch for railroad purposes shall not vary thirty seconds a week when carried, which is mostly in the position of pendant up. In the rating you name the greatest fault seems to be in the dial up and dial down positions—these should be closer. But even with the rates you give the watch should pass, because the greatest error between dial up and pendant up is only four seconds, which in a week would only amount to twenty-eight seconds and hence is inside the half-minute limit.

"Chloride of Gold."—If soft or tinner's solder be mixed with gold, will nitro-muriatic acid dissolve both metals, or will not both metals precipitate together? Again, if silver be mixed with gold, will not both be precipitated together? Would it be best to put scrap with chloride of gold, or to melt the chloride by itself?—We can not see why workmen will persist in trying to dissolve alloyed gold scrap in nitro-muriatic acid, as complications of chemical action cause much trouble and waste. A more efficient and simpler method is to use a solution of nitric acid and water. Or the silver and gold alloy can be granulated by pouring, while molten, from a crucible into a vessel of water given a rapid rotary motion by stirring round and round with a flat paddle. The rolled-out metal is cut into small bits and put into a Bologna flask, and an ounce of nitric acid (before diluting) added for every ounce of alloy. The granulated metal is treated in the same way. If the action of the nitric acid is a little slow, as it will often be in cold weather, set the Bologna flask in a dish of sand heated as hot as the hand can bear. When the chemical action ceases and heating will not renew it, and a little of water is added, the alloy remains undissolved, and enough diluted nitric acid to complete a perfect solution of the alloyed gold. The brown-black particles settled at the bottom of the flask are pure gold, and represent every grain and fraction of a grain of gold contained in the alloy. Carefully pour off the acid, and then wash the precipitate, which you can melt into a button in a black-lead crucible, using carbonate of

potash as a flux, or you can dissolve it in nitro-muriatic acid and make chloride of gold of it. To recover the silver, dilute the acid you poured from the flask one-half with water, then add chemically pure auratic (hydrochloric) acid as long as it throws down any white, curdy precipitate. Let this precipitate settle, then pour off the supernatant fluid and pour on pure water; let settle, and pour off a second time, repeating the operation three or four times, to wash the precipitate, which is chloride of silver. There will be considerable water remaining with the chloride of silver. Add to it a few drops of muriatic acid; insert a rod of pure zinc, and the silver will be precipitated on the zinc as pure metal, which can be melted with a flux or dissolved and made into a silver-plating solution. By adopting this plan you avoid much complication and get back, in a state of absolute purity, all the silver and gold in the alloy. The second clause of your question, in regard to melting chloride of gold by itself, is virtually answered above. In heating chloride of gold the first effect is to drive off the acid, leaving the gold behind in a state of the greatest purity.

"White Finish."—Will you kindly inform me how to produce a pearl-white finish to my engraving on silver? The articles are to be scratched and the engraving to be white. I wish to use the process on sterling, and plate goods.—There are several ways by which such white effects can be secured. With solid sterling goods the articles, after engraving, are heated to anneal them and then allowed to cool, after which they are placed in a five per cent. sulphuric acid pickle to bleach. This, of course, whitens the entire surface of the metal. The surface polish is restored by repolishing. When this plan is pursued it is well to fill the whitened lines with some gummy matter, like gamboge made into a paste with water, and allowed to dry. Another plan is to coat the surface of the metal, either solid silver or plated, with printer's ink applied with a "dabber." This dabber is made by wrapping up a small disk of cardboard, after cushioning it with cotton wool, in a piece of old glove kid, which is used so as to form a sort of a pad. The ink is spread on a piece of glass and the dabber patted on it so as to coat it with ink. This dabber is now patted on the engraved ware so as to coat the surface, except the engraved lines, with printer's ink, which is allowed to dry hard. The article is now placed in a silver-plating solution and the exposed parts, that is, the engraved letters, are plated with a thin, white coating of silver. The gamboge is washed out of the lines with water, and the printer's ink is washed off the surface with benzine. The finest of such effects are produced by combining bright cutting with such dead lines and mat surfaces.

"Non-Magnetic Watch."—I have a customer who owns a very nice non-magnetic watch of the 25-jeweled grade which, after being regulated, will run for two or three months without twenty seconds per month, and will then commence to lose, the rate increasing or decreasing. Regulate it once more and it will repeat the same. I wish to know if a steel hairspring could be substituted without changing the balance. Position and temperature error do not seem to affect it more than other watches.—We would not advise you to make any change at present in either hairspring or balance, as we are inclined to think the falling off in rate you speak of will culminate at some time and cease to present itself. Steel hairsprings have an accelerating rate when first applied, but this passes off with time, and we think very likely the same result will obtain with the non-magnetic hairspring and balance. The watch has a very close rate, and if you make a change the owner will expect at least somewhat better result, which you will be very fortunate if you secure.

"Demagnetizer."—I wish to know more about the mechanical principles of demagnetizing or nullifying magnetism in watches by means of a demagnetizer working with an alternating current. In what way does such an instrument affect only the magnetized parts of a watch, and in no other way influence the other steel parts of the same watch?—The principle on which an alternating current demagnetizer works is based on the idea that in order to impart magnetism to a piece of hardened steel a sensible time is required to acquire magnetism and also a sensible time for its removal. It is also held that by subjecting a piece of steel in which magnetic polarity exists to the influence of such an alternating current, that after a certain time existing or established magnetism in a piece of steel will be neutralized. Now the facts are, that many contingencies exist in all problems of demagnetizing. For example, we have two pieces of steel of precisely the same size and shape, the only difference being one is a harder than the other. Now, these two pieces will not receive or part with their magnetism. This is only one example, but scores of other examples could be cited. In fact, the multiplicity of phenomena attending the problem of magnetizing and demagnetizing are almost endless. Our experience prompts the belief that no process of demagnetizing a watch with all the parts assembled can be entirely relied on, and we would consider no fine watch safe which had been badly magnetized and then demagnetized, no matter by what machine it was treated, except we tried the steel parts piece by piece. We would advise you to read carefully our reply to "Demagnetizer," on page 568, June, 1899, KEYSTONE.

"We like The Keystone more each time we receive it, do not think we could offer any suggestions to improve it."—J. A. Irwin, jeweler, McConnellsville, Pa.

1900

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Showing the nine different players in their respective attitudes. Righten to a set—nine in red and nine in blue. One million sold in New York. Per hundred, \$1.50, by express.

SUMMER RESORT NOVELTIES OF ALL KINDS.

AUGUST, 1900

San Francisco Letter.

There is no reason to complain of business this month, particularly as with the majority of our wholesalers it is considerably ahead of the same month last year, and their confidence in a big fall business remains unshaken. The majority of the traveling men are off the road taking a well-earned rest and getting themselves in readiness for the coming fall rush.

The Northern mining camps are now sending down the gold washed out of the auriferous gravels in the spring by the ton. It is estimated that the Klondike will turn out at least \$20,000,000 before the close of the season. The tributaries of the Yukon within American territory are also proving productive this year, and considerable gold is coming from them. It is too early to speculate with any degree of certainty as to the output of the Cape Nome and Topukuk beaches and the small creeks in the Nome districts. Reports received thence within the past week have been conflicting. Much will depend upon the result of prospecting on the tundra and the outcome of the disputes between rival claimants of locations on adjacent gold-bearing creeks. Until these disputes are settled the working of the ground is likely to be suspended.

Atlin turned over \$1,250,000 last year and promises to do even better this summer, as litigation tied up some of the most productive properties there through a large part of last summer. One of the interesting features associated with the output of Atlin was the manner in which two-thirds of it escaped the payment of royalty. A large part of the gold taken out of the best claims escaped by being paid as wages to the workmen employed, and the claim owners' supplies were paid for usually in gold dust; only the profits on these mines paid the royalty, and that aggregated about \$45,000. Of this amount one per cent was collected by the government. All claims which either barely paid expenses, or were operated at a loss, escaped payment of royalty also. Summing up everything, it is perhaps not an overestimate to assume that the gold-producing districts of the far North will yield from \$25,000,000 to \$30,000,000.

The concentrating plant of the Roy Power Mines Co., Ltd., Phoenix, Arizona, has been in operation for three weeks, and is working successfully in every detail. The company is planning for enormous reduction works. An excellent another site has been selected at Keilwin, where water is available, and according to the general plan all machinery will be capable of treating 1000 tons of ore daily. An innovation in Arizona copper mines was made with the introduction by the Roy Co. of crude oil exclusively for fuel. The people of Alameda, that charming little city just across the bay from 'Frisco, are somewhat excited over the fact that a prominent ranch owner at Leona Heights has discovered a mine of iron and copper ore on his property, which promises to pay big returns. It has long been known that gold and other metals were to be found in the foothills, but they were not in paying quantities. Now it looks as though a mine had been found which can be worked with a large margin of profit.

For many moons have the traveling men of the East been expatiating to the jewelers of California on how baseball should be played, and how they used to play it themselves when they were younger. And then they would twist with pride to the hour on how it occurred, and if their listeners eyes did not bulge out with astonishment, or if their interest in the story seemed to wane, the Eastern man, as a rule, would look injured and sort of feel that their story was not appreciated, and that the average Californian did not know how to play ball, anyhow.

And so it was, when towards the end of June, a number of the boys decided to Sunday over in 'Frisco territory. They thought they would give the resident wholesalers an object lesson in playing ball, and headed by a brass band, the best that 'Frisco could afford, on a glorious afternoon in June they proceeded into the Presidio followed by every jeweler, wholesale and retail, within fifty miles of town, accompanied by their sisters, their cousins and their aunts, office boys, bookkeepers and friends, in carriages, horse-cars, omnibuses and vehicles of every description, to play the game of their life. And such a game as the two nines put up was, indeed, worth coming miles to see. To be sure, there were some few unpleasant features, as for instance, when Cobb wanted to lick the umpire for calling three strikes and out, when, as Cobb afterwards explained, he hadn't struck the ball once, even; and then Limbick was dead wrong for hitting the score, because he had him credited with stealing a base, and, as Limbick said, why

should he steal a base, when he had no use for it? But these sundry little matters were quieted down and an excellent away, and the game proceeded amidst intense excitement. A well-known jockey fell backward clean over the fourteen-foot fence, excitedly applauding a twenty-eight foot side of Brown's to second, and several other well-known wholesalers yelled themselves hoarse when Herman Hadenfeldt threw his left shoulder out of place trying to knock the lining out of one of Barton's curves, and when altogether. There were some wonderful plays, and when Whittier turned a double somersault and threw a runner out at the home plate from deep left, it brought everybody to their feet; and Sonelfeldt swallowed his chewing gum when he caught the ball, nearly choking to death in his excitement. Then Fay again electrified the big crowd when, after running nearly a mile and falling down twice, he caught Meadows' line hit, which looked good for a home run, with one hand, lying flat on his stomach. It was simply wonderful, and quite the star play of the season. And it is rumored he has since been offered a position with one of the big league teams. The game was very close, and stood eight to eight in the ninth inning, but big Meadows popped up a little fly, with Abe Cooper on third, and before the ball came down he stepped away from the plate about six feet, and hit it again, bringing Cooper in and scoring a home run himself. There were some clips of "fraud," "robber," etc., but the umpire allowed the play, and the boys from the East had to borrow money to get home. There was keen rivalry as to who should represent the East and West in this memorable game, and those who were not chosen were greatly disappointed, but went to see the game, nevertheless. In fact, there was scarcely a wholesaler or retailer who did not go, and the familiar faces in the grand stand made one think they must be close to Maiden Lane, instead of some 3000 miles away. While the 'Frisco wholesalers drove out in their four-in-hands and tally-ho's, and while everybody present realized that the best team, won, still there was much sympathy expressed for the losers, several of whose broke down after the game was over and wept. Cobb, of Daggett & Clap, had to be taken to his hotel in a carriage. Beautifully illustrated score cards were distributed to all present. The score follows:

LOCAL WHOLESALESLERS.

	R. H.	S. B.	A. P.	O. H.
P. Walsh (Armer & Weinschenk)	1	0	0	0
Joe Lewis (Armer & Weinschenk)	1	0	0	0
H. Foster (Heacock & Freer)	1	0	0	0
H. Hadenfeldt (Hadenfeldt & Hadenfeldt)	1	0	0	0
H. Hadenfeldt (Hadenfeldt & Hadenfeldt)	1	0	0	0
C. Hadenfeldt (Hadenfeldt & Hadenfeldt)	1	0	0	0
J. Gaffney (Keystone Watch Case Co.)	1	0	0	0
L. Amick (Nordman Bros.)	1	0	0	0
W. E. Meadows (Philip & Adams)	1	0	0	0
Total	10	4	1	0

EASTERN TRAVELERS.

	R. H.	S. B.	A. P.	O. H.
C. Sonelfeldt (D. F. Briggs Co.)	1	0	0	0
Goldberg (W. S. B. B.)	1	0	0	0
Barton (H. C. Cummings & Co.)	1	0	0	0
Brown (E. F. & H. J.)	1	0	0	0
Fay (R. F. Simmons Co.)	1	0	0	0
Limbick (Thos. W. Foster & Bro. Co.)	1	0	0	0
Cobb (Daggett & Clap)	1	0	0	0
Amick (Nordman Bros.)	1	0	0	0
Whittier (Whittier & Davis)	1	0	0	0
Total	10	0	0	0

SCORE BY INNINGS.

	1	2	3	4	5	6	7	8	9	10
Local Wholesalers	0	0	0	0	0	0	0	0	0	0
Eastern Travelers	0	0	0	0	0	0	0	0	0	0

Home runs—Brown and Meadows. Three base hits—Cobb, back hits—Wash, Hadenfeldt and Cooper. Strike out—by Hadenfeldt, 3, by Barton, 2. Double plays—Fay to Hadenfeldt, Goldberg to Meadows; Amick to Meadows to H. Hadenfeldt. Time of game—1 hour, 35 minutes. Umpire, Donnelly.

Louis C. Koberg, of Hadenfeldt, Cal., is spending a few days in 'Frisco.

H. C. Hoffler, one of the leading jewelers of Sacramento, deserted that warm city for a few days of 'Frisco breezes.

A. J. Bailey, of Los Angeles, Cal., bought out the optical business of P. S. Hunt, Sacramento, Cal., where he will devote his time to the correction of anything and everything pertaining to bad eyesight. Mr. Bailey is not only a very fine refractician, but a skilled workman as well. He takes with him to Sacramento the best wishes of a host of friends.

G. Naber, of Fresno, Cal., was down from the rain coast recently.

G. H. Boudreau, of Modesto, Cal., was a recent and welcome visitor in 'Frisco.

Charles Witmack, one of the leading jewelers of Fresno, Cal., is enjoying a short vacation, with his wife, in San Francisco.

THE KEYSTONE

793

Wm. Johnson, the popular and all-around optician of the Standard Optical Co., and Belgium have foreer of some note, has deserted Kearny Street and his pet, the imported hares, for a three-weeks' sojourn in Sonoma County, where he will put in his time fishing and hunting.

H. C. Ray, of Visalia, Cal., with his brother, has gone for a month's fishing at Lake Tahoe.

O. Granisher, of the Boston Optical Co., of Los Angeles, is in 'Frisco.

There was quite a big fire in the Levinson Building, 134 Sutter Street, early in July. It started at three o'clock in the morning in the factory of Donohue & Kerdel, manufacturing jewelers, and for awhile it looked as though the entire building was doomed. The firemen, however, succeeded in getting the fire under control, but not until the machinery and fixtures of Donohue & Kerdel were destroyed.

Leon Nordman, of Nordman Bros., has gone to Lake Tahoe for a month's vacation.

J. C. Luckenbach, of Los Angeles, has disposed of his interest in the firm of H. J. Whittier & Co., and will open a new store for himself in the Bryson Block, on Spring Street.

Arthur Judis, with Alphonse Judis, has gone for a short vacation to Santa Cruz Mountains.

A. O. Sailerberg has returned to Everett, Wash., after quite an extended visit to Chicago.

Frans Mahoney, of Tacoma, has made some very extensive improvements in his store which, when finished, will be one of the finest jewelry establishments in the Northwest.

The engagement of L. L. Berens, of New Whatcom, Wash., is being whispered around in the society contingent of that charming place.

Popular Charles Weinschenk, of Armer & Weinschenk, has just returned from a business trip through the Northwest where he has succeeded in buying quite a fine collection of elk's teeth.

Harry Heacock, of Heacock & Freer, has just returned from a month's outing in the wilds of California. He took a tent with him and lived out in the open, and got back to the city hewn as a Comanche Indian.

J. W. Redhouse, formerly with Albert Hansen, of Seattle, is now with C. W. Richards, same city.

Joseph Hoedel, who has been in Europe for the last three months, expects to return to Seattle by the end of July.

L. B. Cohn, Los Angeles, Cal., has opened a branch store at Seattle, Wash.

Emile Pfandl, popular jeweler of Aberdeen, Wash., who has been enjoying himself in Paris, Germany and Switzerland, is expected home this month.

Jake Lesner, one of the leading jewelers of Portland, Oregon, surprised his numerous friends in 'Frisco recently, by dropping in on them without any notice. As soon as it was known that he was in town, however, he was kept busy acknowledging the glad hand.

Mr. Maurer, formerly of Flagstaff, Ariz., has opened a new store in Eugene City, Oregon.

O. Schlender, of Schlender Bros., New Whatcom, is taking an extensive course in optics in the East.

Alphonse Judis has just returned from an extensive trip through Europe accompanied by his wife and son. They spent considerable time at the Paris Exposition, and the fruits of his buying will be seen later on in the leading stores of California.

Amos Huggins, of A. I. Hall & Son, returned the latter part of July to 'Frisco from the second trip he has made this year to Eastern factories. This firm hopes to be in their new store early in August.

C. S. Lindenhau, master mechanic of the Jewelers' Building, 207 Sutter Street, 'Frisco, and one of those genial men everybody delights to know, came mighty near going to the "happy hunting grounds" recently. He had stepped into the elevator shaft to overlook some machinery when someone, unknown, ran the elevator down on him and doubled him into a space seven sizes too small for him; to make matters worse it caught him in a crouching position, and before it could be stopped came near breaking his back and, as it was, laid him up for nearly a month. Usually of a very quiet disposition, the people in the building and near neighborhood were naturally startled to hear him yell like a Comanche Indian when the elevator hit him, and everybody was relieved when they got him out of the hole alive.

G. Naber, of Fresno, Cal., was down from the rain coast recently.

G. H. Boudreau, of Modesto, Cal., was a recent and welcome visitor in 'Frisco.

Charles Witmack, one of the leading jewelers of Fresno, Cal., is enjoying a short vacation, with his wife, in San Francisco.

I might as well try to crawl through the eye of a needle as to do without The Keystone. Enclosed find my subscription renewed.—C. A. Sturgis, jeweler, Watkinson, Pa.

We handle
everything
needed by
retail
jewelers.



C.H. KNIGHTS & CO.,

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of

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dealers.

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are unequalled
for filling your
orders with care
and promptness

AUGUST, 1900

THE KEYSTONE

792

Among the Trade.

The trade are invited to send us reliable items of news for this department.

Arkansas.

G. A. White, formerly of Hope, this State, who enlisted in the army and went to the Philippines, was killed in a battle with the Filipinos. He had previously been promoted to lieutenant, and his record was a most honorable one.

California.

Al. Schaefer, Monterey, is enlarging his place of business, preparatory to putting in a new stock of jewelry. The jewelry store of C. H. Leggett, Merced, is now in possession of A. E. Howard and Leigh Ingalsie, who purchased the business and good will of the establishment. The building will be thoroughly renovated.

Colorado.

Daniel Roche, formerly with J. C. Bloom & Co., Denver, has opened up a shop in the Kitteridge Building. Denver Tontine Savings Association, of Denver, has been incorporated for the purchase and sale of diamonds with a capital stock of \$30,000. Incorporators: J. W. Harris, G. H. Fry, J. W. Wigton, all of Denver.

Henry Auling, formerly of Trinidad, has opened up at Grand Junction.

Georgia.

T. H. Wynne has moved his Hawkinsville branch to Cochran, combining it with his Cochran store. R. S. Davies, who was working in the branch store, will open a repair business for himself in Vienna.

Illinois.

S. M. Strain, Irving, has opened in the jewelry business and reports a good trade.

A good purpose served by a copy of "The Keystone Repair Record Book" is explained in the following clipping from a Staunton, Ill., newspaper: "George W. Fox, a farm laborer, was recently in St. Louis and while near the Union Station was knocked down and robbed of an open-face silver watch and three dollars in money. He asked W. J. Krug, our jeweler, to try to find the watch. Mr. Krug wrote to Chief of Police Campbell, of St. Louis, to be on the lookout for the watch and gave him a complete description of it. He subsequently received a letter from Chief Campbell stating that the watch had been found." Mr. Krug says the record was kept in a "Keystone Repair Record Book."

H. L. Finzel, jeweler, Milledgeville, has bought the Meyers Building, near the Mummert Hotel, and moved his business to the new quarters.

Chas. A. Emely, Casey, has added his stock to that of Lorenzo M. Stanton. The firm name is Emely & Stanton.

Julius Walk & Son, Indianapolis, are remodeling the interior of their store. A beautiful metal ceiling, frescoed in pale blue, has been put up, and the walls will be decorated to match. The cases and all the jewel trays have been refitted, and the show window will be remodeled. The interior of the store will also be painted.

Indiana.

W. H. D. Linter, has opened a new store at Fairmount.

Iowa.

Frank P. S. Broderick, of Schroeder Bros., Manning, was married on June 6th to Miss Grace Shephard, an amiable and popular young lady. THE KEYSTONE hastens to extend congratulations.

Edward Kooreman has bought the jewelry stock of F. J. Kanber, Alton.

Kentucky.

C. M. Wiseman & Son, Louisville, have secured the contract to put a tower clock in the German Insurance Bank in that city. The contract was awarded the Louisville firm over a number of competitors from points outside of the city.

Kansas.

Boyle Bros., Lindburg, have purchased a new store in the same block as their old store and are now occupying it. Porter & Marlow, Moline, have dissolved partnership. C. L. Porter will continue the business in the same location.

R. L. Kirby, recently of Tonganoxie, has moved to El Dorado, where he will open a jewelry store.

Louisiana.

Hart & Packer is the name of a new firm in Shreveport. Both partners are hustlers of the first water and are already enjoying a good business.

Maine.

The store of William C. Bryant, at 40 Main Street, Bangor, is being improved. Mr. Bryant has removed to the Masonic Building, Main and Water Streets, until the improvements are completed.

The new jewelry and silverware store of George T. Spinger, 313 Congress Street, Portland, is now open for business. Geo. A. Harmon has charge of the watch and jewelry department.

Maryland.

O. D. Wareheim, formerly of 1205 Patterson Avenue, Baltimore, has sold his business there to Geo. E. M. Wareheim, and will move to New Oxford, Pa., where he has fitted up a new store with fine mahogany fixtures.

Massachusetts.

The F. O. Robbins Co., Springfield, has filed a certificate of incorporation at the State House in Boston. The capital stock is \$40,000. J. Frederick Carl is president of the new corporation, while its treasurer is Frank A. Robbins.

Michigan.

C. D. Campbell, formerly of Fife Lake, has located in Belleaire and will put in a stock of jewelry in a store which he has purchased.

P. B. Smith has succeeded I. V. Sherman, Cassopolis. William Stolz, jeweler and optician, of Saginaw, has been spending the past month in the East. He came to Philadelphia to attend the annual meeting of the Turners, of which he is a member, and during his stay in Philadelphia made a pleasant call at THE KEYSTONE office. Mr. Stolz also spent a week in New York City and in the well-known resorts in that vicinity. He reported the trade outlook for the fall as very promising. Trade conditions in his city have changed considerably in the last few years, and instead of depending so largely on lumber, as was the case formerly, the mining of soft coal is now quite an important factor in the local trade conditions. A number of mines have been opened up during the past few years and the product is becoming quite a factor in the city's prosperity.

L. M. Rotham recently opened a repair shop and jewelry store at 90 Woodward Avenue, Detroit.

Trash Bros., Detroit, furnished the handsome loving cup for the winner of the Detroit Yacht Club series, to be finished the latter part of August.

Artemas Pike, of Orangeville, has bought the jewelry stock of Geo. N. Baldwin, Leonard.

W. Z. Seales, Petoskey, has moved to a new location and into one of the best stores in Michigan.

Minnesota.

G. P. Whiteside, New Albany, has renovated and remodeled his store and put in new fixtures. The store is now very pretty and complete as to stock and furnishing.

Markham & Slack, Chaska, have moved their jewelry establishment into more commodious quarters.

Hunt, the jeweler, of Tupelo, is a liberal advertiser, and an original advertisement writer. He has little respect for the beaten track, and some of his advertisements are unique specimens of publicity. We have his word for it that they pay.

New York.

Albert C. Zilliox has succeeded Zilliox & Schietrum, Buffalo.

A. Winte, Suffern, has removed his jewelry store and residence to the opposite side of Lafayette Avenue.

Ohio.

Edward L. Feyer, Portsmouth, died last month of stomach trouble. The deceased had been in Portsmouth since 1889, and was very successful in business. He was noted for his integrity and highly esteemed.

C. H. Harris, Portsmouth, recently sold seventeen watches to Wm. Dever, of Flat, this State. The watches were for presentation to Mr. Dever's seventeen granddaughters.

Oregon.

J. E. Richards, McMinnville, has moved into new quarters in the Handley building.

J. A. Maurer, late of Seattle, Wash., has purchased the jewelry and watchmaking business of W. L. Copperrnoll, Eugene, this State.

Pennsylvania.

J. E. Roy, Bloomsburg, has purchased from Geo. W. Heas his stock of photographic cameras and photographic supplies.

J. Kilgour has bought out the jewelry business and stock of J. B. Cross, Bradford, and will continue at the same place.

South Dakota.

The bankrupt stock of L. W. Booth, Watertown, was purchased from the assignees, F. P. Ambuster, by John H. Raven, jeweler's auctioneer, who closed out the entire stock and fixtures at auction.

Tennessee.

Fred. Gossman, Somerville, who with his wife left about three months ago for a trip to Europe, has returned. They visited Germany, Holland and France, including the Paris Exposition.

Texas.

R. D. Healy has succeeded to the business of Healy & Prewitt, Gatesville.

Geo. W. Hickok & Co., of El Paso, have been succeeded by W. T. Hixson & Co.

Edwin Burfield, of Jefferson, has a rare horological genius, and delights in doing difficult and complicated repair work. Among his curios is an old English patent lever, this model, which he converted into a modern watch by taking out the fuse wheel and barrel and putting in a going barrel and stem-winding pendant attachment with lever setting, all made on his own lathe. The watch is a perfect time-keeper. He also succeeded in making new pieces for a chronograph to replace those thrown away by an incompetent who thought the watch did not require so many pieces. The new parts were turned out on his own lathe, and are perfect in every respect.

R. D. Sanders, late of Bastrop, has bought out W. Timms, of Cleburne, and will continue the business at the latter place. We wish him every success in his new venture.

W. C. Lanford, formerly of the Thomas Lawrence Jewelry Co., will open up a first-class jewelry store in Cleburne, under the name of Cleveland Jewelry Co. Mr. Lanford is a young man and skilled mechanic. He has lots of friends and every promise of success.

M. Miesch, of the Lawrence Jewelry Co., Cleburne, will visit New York for the purpose of purchasing Fall stock.

Virginia.

N. Highfield, of Newport News, having concluded his auction, is advertising the remainder of his stock at private sale.

J. R. Sprague, Newport News, has been appointed watch inspector for the Chesapeake and Ohio Railway at Newport News. Notwithstanding that this is the largest terminal in the South, the C. & O. has never heretofore had an inspectorship at Newport News.

Wm. M. Overton, of Elizabeth City, has located in Hatteras as a jeweler.

Washington.

Capt. Z. K. Straight, of Walla Walla, was recently elected president of the Northwest Sportsmen's Association. The seventeenth annual tournament of the association will occur at Walla Walla in June, 1901.

A local journal of Walla Walla, this State, pays a merited tribute to J. B. Caldwell, the enterprising and successful jeweler of that city. Mr. Caldwell settled in Walla Walla in 1880 and went into the jewelry business during 1880, the firm name being Caldwell & Thorn. During the Spanish-American war Mr. Caldwell went to the Philippine Islands as second-lieutenant of the company sent from Walla Walla, and during his absence his partner, Mr. Thorn, died. Upon Mr. Caldwell's return he purchased Mr. Thorn's interest and the name was changed to J. B. Caldwell.

Wyoming.

E. D. Carter, Laramie, has been appointed inspector of watches for the western division of the Union Pacific Railway.

F. KROEBER & COMPANY

now at
14 Maiden Lane
New York



1 Day
Clocks

French
Satin
Gold



JOS. MAYER & BROS. SEATTLE, WASH.

Manufacturers of

SOLID GOLD JEWELRY
STERLING SILVER SPOONS

REPAIR AND SPECIAL ORDER WORK
RECEIVES PROMPT ATTENTION

We carry a complete line of WATCHMAKERS',
JEWELERS' AND ENGRAVERS' TOOLS AND
SUPPLIES, and solicit your orders at Eastern prices.

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1847 ROGERS BROS. PLATED WARE.

LEADERS IN JEWELERS AND WATCHMAKERS TOOLS AND MATERIAL

THE LARGEST SHOP IN THE WEST.
WE DO NOT EMPLOY TRAVELERS: THE KEYSTONE, OUR PROMPTNESS
AND THE RIGHT PRICES IS WHAT HAS MADE OUR FIRM ONE OF THE
LEADERS OF THE WEST. IN THE MFG. JEWELRY TRADE AND
IMPORTERS OF DIAMONDS AND PRECIOUS STONES WE LEAD.

REPAIRING OF
JEWELRY OUR
SPECIALTY

FINE WATCH
REPAIRING

MEYER

DIAMOND IMPORTERS AND ENGRAVERS

1016-1018 MAIN ST.
KANSAS CITY, MO.

JEWELRY

AUGUST, 1900

THE KEYSTONE

792

Kansas City and the Great Southwest.

The retail jewellers are much pleased over the result of their sales during the convention week last month and all report a large sale of their convention-hall souvenir spoons, and say they are ready to subscribe liberally for a like occasion at any time.

The large retail and jobbing houses have signed an agreement to close Saturday afternoons during the warm months of July and August. Those not agreeing to this proposition are allowing their employees an hour off of each day, closing at five o'clock, and this arrangement seems to be equally satisfactory with a number of the retailers.

Will. Schumann, of J. A. Norton & Son's force, returned from his vacation during the month, which was spent at "Falmouth," enjoying all of the privileges which this cool and healthy suburb offers.

The stock of W. M. Woolard, of Olathe, Kans., was recently placed in the hands of the sheriff, the disposition of which will be announced later. The local jobbers are more or less interested in the failure.

Gurney & Wagon, Walnut Street jewelers, report an excellent trade during the past few months, which are supposed to be dull season with the jewelers.

D. P. Haller, with Jaccard Jewelry Co., has been quite ill with typhoid fever. His brother, A. P. Haller, with Cady & Olmstead, the pioneer jewelers, was also ill several weeks with the same fever, but is again at his desk.

J. R. Mercer, the Eleventh Street jeweler, renowned for his fine window displays and the manner in which he combines nature's loveliest productions (flowers) to display his fine novelties, again did himself proud during the National Democratic convention week, using the American flag in profusion, making very handsome and attractive windows. One window contained a "loving cup" with a silver wish-bone attached to one handle, which bore the inscription, "We Wish You Well." Mr. Mercer was recently appointed watch inspector for the Santa Fe Railroad, and as it was given unsolicited, he is much pleased, and the prospects are good for other appointments in this line in the near future.

Jeweler E. H. Tipton, Ottawa, Kans., has engaged in the Belgian hare business quite extensively. He is also a chicken fancier.

Arthur Clark, for many years in the material department of J. A. Norton & Son, is now in the employ of L. Bauman Jewelry Co., St. Louis, Mo. Arthur is a bright young man, applying himself closely to his duties, and his friends here with him success in his new position.

F. Mellichamp, of Ottawa, Kans., has a very handsome and attractive optical parlor in connection with his jewelry business, and is rapidly making quite a local reputation as an optician.

J. W. Bishop, of Gower, Mo., recently opened a new jewelry store at St. Joseph, Mo.

Arthur Kahn stopped over in the city recently on his way to Silver City, N. M., where he went in the interest of the Azure Mining Co.'s properties.

A. Stromple, well known among the spectacle fraternity, died last month in this city.

J. R. Mercer and wife left during the month for the Thousand Islands, where they will visit Mr. Mercer's brother, who has an elegant summer cottage at that point.

Mr. Mercer will make a trip to New York before returning home, about the middle of September, to give his personal attention to his import novelties, which are expected at the customs house about that time.

Woodstock, Hofer & Co. have made a number of changes in the arrangement of their office recently. This firm had many visitors and buyers during the National Convention, and it is conceded now by everybody here that as an entertainer of Democrats C. C. Hofer is without a rival.

E. B. Meyer, of Memphis, Tenn., visited his brother, I. Meyer, during the National Democratic Convention.

Pete McMahon, formerly with the Edwards & Sione Jewelry Co., but now of Rockford, Ill., was in the city during convention week.

F. J. Nevin, in charge of the material department of the Meyer Jewelry Co., was somewhat disabled during the last month with a sore foot, and found it necessary to use a crutch.

Geo. Edwards, of the Edwards & Sione Jewelry Co., has gone to Colorado points to spend the heated term. Mr. Edwards was accompanied by his family.

Harry B. Carwell, who for a number of years was in charge of the watch department at the Jaccard Jewelry Co.'s store, but who is now conducting a retail jewelry business of his own at 1015 Walnut Street, has recently designed and made a unique as well as handsome cup out of a Spanish shell that was fired at the American flag at the battle of Santiago de Cuba. The cup was made at the request of the former members of Company E, of the Third Missouri Infantry, U. S. V., which was mustered out of service at the end of our war with Spain. Mr. Carwell saw service in the Spanish-American war as a member of this company and this cup was presented to his old comrades for the purpose of having made a handsome souvenir, which was presented to our City Fire Department July 17. Company E, of the Third Regiment, has always been in special favor with our fire department and it is for this reason that the boys desired to present the chief and his boys with some trophy of their high regard. It is certainly very beautiful: the base upon which it stands being made of Missouri iron and supported by three bronze columns, and on the face of the shell a silver plate bearing an appropriate inscription, with the official roster of Company E, of the Third Missouri Infantry, U. S. V., and accompanying it was also a handsome case with a silver plate across the upper case, giving the names of the chief and assistant chief, to whom it was formally presented, and specifying that it included the whole force in general, but only giving the names of the chiefs. Mr. Carwell still retains the position and title of principal musician with the Third Regiment Band, and is a very enthusiastic member, taking great interest, too, in the original Company E, of the regiment.

The C. L. Merry Optical Co. have a new bookkeeper, C. T. Merry, father of C. L. Merry, who has acted in this capacity since the office was established, retiring, taking a less active part in the business of the firm, owing to his advanced age.

Edith Norton, daughter of C. B. Norton, is home from a vacation of several weeks spent at Excelsior Springs.

E. G. Albee, the Grand Avenue jeweler, returned recently from a trip to Excelsior Springs, where he went to recuperate after a very busy and satisfactory year of business.

Frank Tyree, formerly bookkeeper with J. A. Norton & Son, has resigned his position and entered the employ of the Swift Packing Co.

N. A. Heath, Jr., the young and progressive jeweler, of Hebron, Neb., spent convention week in the city, and judging from the difficulty he had to leave, think it is very probable that he will pay Kansas City another visit in the near future.

H. E. Leasure, of Harrisonville, Mo., was burned out recently, losing almost everything, which we much regret to learn, but hope he will soon be able to resume business at the "old stand."

T. S. Lidstone, of Durkorn, Mo., and two friends stopped over on their way to the Paris Exposition, and will return by way of England and stop at Prince Edward Island, Canada, the old home of Mr. Lidstone.

Felix Fricke, bookkeeper for Meyer Jewelry Co., is passing the cigars among his friends, on the advent of a son in his family.

A. Mandelberg, the well known jeweler, of Omaha, Neb., was in the city recently looking around.

Fred. Eynell, of Eynell & Hickman, Union Avenue, who is now in Europe, reports having a very fine time, and that he expects to remain about four months longer.

S. R. Abney, 1203 Grand Avenue, has recently been remodeling his store, and it now presents a very attractive appearance. It is evident that business is constantly on the increase with Mr. Abney.

C. H. Morrison, of Topeka, Kans., who has been in poor health for some time past, has gone to the Pacific Coast, leaving his brother, S. M. Morrison, in charge of the business. THE KEYSTONE and Mr. Morrison's many friends hope to hear of his rapid improvement at an early date.

J. C. Hutson, formerly one of F. A. Hardy & Co.'s "knights of the grip," but now located in Omaha, Neb., in business for himself, spent several days in the city during the National Democratic Convention last month, renewing old acquaintances. Jim's many friends fail to see any change in him.

Mrs. Hoffman and Ida, wife and daughter of L. Hoffman, of Leavenworth, Kans., have gone to Colorado Springs to spend the summer for the benefit of Mrs. Hoffman's health, which we understand is much improved since her arrival there.

Henry Paulson, manager for J. A. Norton & Son, recently returned from a business trip to Chicago.

Will. Mainhardt, with M. Truby, of Independence, Kans., was married during the month to Miss Maud Henney, of this city. After the wedding ceremony they left for Excelsior Springs, where their honeymoon was spent, returning to Independence, Kans., their future home. THE KEYSTONE extends congratulations.

J. A. Selby, of Caney, Kans., was burned out during the month, but, as he was insured, the loss will not be heavy.

The silver case opened given out as souvenirs during convention week last month by the Edwards & Sione Jewelry Co. proved a great hit among the visiting jewellers. It was a happy conception on the part of this firm and was well carried out.

E. S. House, formerly watchmaker with D. D. Williams & Co., Emporia, Kans., resigned his position to go on the road for himself as traveling optician.

Visitors and buyers in this market during the Democratic National Convention and since were: Aaron Plank, Hutchinson, Kans.; Sam. Friedberg, Topeka, Kans.; B. L. Huley, Monett, Mo.; S. C. Fragarans, Topeka, Kans.; Fred. Esig, Plattsmouth, Mo.; Ira Stuttsman, Garden City, Mo.; S. M. Coffman, Braymer, Mo.; W. V. Bishop, Kensington, Kans.; E. S. Haines, Joplin, Mo.; W. S. Noble, Drexel, Mo.; Frank Mitchell, Marshall, Mo.; Mr. Meeker, of Fleming & Meeker, Charate, Kans.; A. L. Light, Slater, Mo.; C. A. Thomas, Norborne, Mo.; E. M. Proctor, McLeath, Kans.; F. L. Withup, Willow Springs, Mo.; J. L. Potts, Marceline, Mo.; F. W. Bartlett, Leavenworth, Kans.; Roy Smithers, of Smithers & Son, Cameron, Mo.; H. C. Schultz, Hays City, Kans.; T. S. Lidstone, Draborn, Mo.; W. N. Kirkham, Wallace, Mo.; A. W. Pettit, Bonner Springs, Kans.; C. G. Morrison, Olathe, Kans.; J. M. Coffman, Polo, Mo.; H. A. Tibbals, Okaloosa, Kans.; H. W. Starcke, Junction City, Kans.; W. C. Sellers, Medicine Lodge, Kans.; J. H. Hines, Stanberry, Mo.; "Billy" Sams, of Sams & Waddell, Clinton, Mo.; Mr. Duke and wife, of Duke, Exengen & Duke, Olathe, Kans.; J. M. Maskell, Pleasant Hill, Mo.; J. E. Hathaway, Parkville, Mo.; J. S. Lang, Coffeyville, Kans.; M. F. Kohler, Parsons, Kans.; Dick Kolstad, Pleasant Hill, Mo.; D. L. Brown, Glasgow, Mo.; John Grondler, Sioux City, Iowa; J. B. Bryant, Pleasanton, Kans.; Frank Waddell, of Sams & Waddell, Clinton, Mo.; Jim Hamilton, St. Joseph, Mo.; John Fleckenstein, Sioux City, Iowa; E. W. Kearby, Rocky Ford, Colo.; A. J. Kilmer, Wellsville, Kans.; W. Beasley and family, of Beasley Mer, Co., Rich Hill, Mo.; A. Reese, Troy, Kans.; J. W. Phillips and family, Chanter, Kans.; J. H. Kittridge and wife, of Chillicothe, Mo.; W. B. Howell, Albany, Mo.; R. C. Libbey, Weir City, Kans.; D. J. Freese, Higginsville, Mo.; E. S. Gregory, Gallatin, Mo.; E. A. Duffinger, Bertrons, Kans.; W. Edmonds, North Topeka, Kans.; M. A. Lewis, Carbondale, Kans.; Theo. Burkhardt, Trenton, Mo.; F. H. Robertson, Blackwell, Okla. Terr.; Ambrose Mellichamp, Ottawa, Kans.; Henry Mellichamp, Garden City, Kans.; E. R. Matters, Neosho, Mo.; Mr. Phillips, Neosho, Mo.; J. H. LeRoy, Fairbury, Neb.; F. W. Sellers, Wellington, Kans.; T. L. Baskett, Unionville, Mo.; J. A. Wilkinson, Des Moines, Iowa; F. M. Dillon, Bonner Springs, Kans.; G. E. McCoy, Polo, Mo.; Horace Shadel, Rogers, Ark.; W. M. Wright, Elk City, Kans.; C. A. Wolf, Topeka, Kans.; Herman Sick, Wellington, Kans.; G. H. Gardner, Pittsburg, Kans.; O. C. Zamsiel, Webb City, Mo.; N. A. Heath, Hebron, Neb.; Mr. Defoe, Tecumseh, Neb.; J. B. Hampton, Colby, Kans.; W. H. Meyer, Lawrence, Mo.; N. B. Jeter, Butler, Mo.; H. W. Numanaker, Ellsworth, Kans.; H. K. Herliet, Eldorado, Kans.; J. M. Eap, Lamar, Mo.; C. H. Paxton, Keytesville, Mo.; A. F. Zimmerman, Warrensburg, Mo.; G. W. Fort, Stafford, Kans.; G. E. Young, Moberly, Mo.; D. G. Smith, Lincoln, Neb.; J. A. Zimmerman, Warrensburg, Mo.; J. A. Barr, Logan, Iowa; E. L. McDowell, Arkansas City, Kans.; W. E. Collins, Chillicothe, Mo.; M. C. Rosenfield, Leavenworth, Kans.; C. C. Stevenson, Pittsburg, Kans.; M. Nobish, Sumner, Iowa; W. E. Conner, Goodland, Kans.; A. Z. Megele, of L. Megele Sons, Richmond, Mo.; I. N. Collins, Cherokee, Kans.; Harry Davis, Canon City, Colo.; Lesley White, Louisville, Kans.; G. E. Osborn, Taylor, Kans.; T. W. Beach, Kearney, Mo.; M. L. Gibson, Linners, Mo.; F. B. Bonebrake, Holton, Kans.; Chas. Monbacher, Wichita, Kans.

"No room for improvement in The Keystone" can't be said. I shall under no circumstances let it run out, for it's worth many times the subscription price.—L. Huestetter, jeweler, New Hamburg, Ont.

Reichenberg-Smith Co.

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Elgin, Waltham
Hamilton and New York Standard

Gold and Gold Filled Cases

We carry a full line of standard makes

Diamonds

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The E. Ingraham Clock Co.
Ansonia " "
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Omaha

Members of the Jobbers' and Manufacturers' Association.
EXCURSION TO OMAHA AND RETURN, from July 15th until
November 1st, 1906. WRITE FOR PAMPHLET.

Nebr.

THE LEADER

in High-Grade Watches is the

VACHERON & CONSTANTIN

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THE LEADER in
Quality,
Adjustment,
Durability,
Style.

It Fits All Sizes of American Cases.

New Grades—New Sizes—New Improvements.

Special Grades for Railroad Men.

EDMOND E. ROBERT,

SOLE AGENT,

3 Maiden Lane,

New York.

ELGIN HOROLOGICAL SCHOOL

OLDEST AND BEST

ESTABLISHED 1888

We aim to make **competent workmen** of our students. That we succeed is certain, as our graduates are filling the best positions in the country.

We teach you how to **repair** watches and jewelry. We teach you how to engrave.

We can give you a thorough course in Optics.

We do **not** teach you to **make** watches and **useless** tools—we leave that to our factories.

School open day and evening. No time wasted.

Send for catalogue to

Elgin Horological School

Elgin, Ill., U. S. A.

Omaha and Vicinity.

The jewelers of Omaha and Nebraska in general are making preparations for the largest fall trade which has been experienced in years. During the middle of July wholesalers and retailers were looking a little "down in the mouth," because the prospects were none of the brightest. A continued spell of dry weather began to make it look dubious for even a half crop, and as Nebraska is purely an agricultural State, a half crop means practical extinction of business interests. Shortly after July 15th, however, a glorious change came over the situation, and now smiles are to be seen where the frown of anxiety was becoming very prominent. Rain, "million-dollar rain," began to fall and day after day the moisture continued to press itself into the soil, until not only a half crop but the greatest crop on record is assured to the State. Three hundred millions of bushels is the estimate placed on the corn which will be produced, and even at the rate of 15 cents, yielded to the farmer, the amount of money the crop will pour into the private coffers of the State is enormous. Hence, not only do the merchants expect a magnificent business, but they are preparing to increase even the egregious trade already in prospect. To accomplish this, every device which the ingenuity of the Western business man can conjure is being brought into being. County fairs, plans for which were delayed pending the crop prospects, will be made far more attractive than heretofore. Street fairs in the smaller towns are cropping out all through the State, while in the larger cities more pretensions and undertakings than ever before inaugurated are being rapidly and enthusiastically prepared.

In Lincoln the jewelers are counting on heavy profits from the State Fair, the first which has been held there in over three years. Railroads have been importuned for low rates from all points in the State, exhibitors are hastening their devices to attract attention, local papers are being filled with matter concerning the "greatest show on earth," and the whole State is taking an interest in the affair.

In Omaha there is cause for rejoicing, over the approach of the annual festivities prepared by an order called the Knights of Ak-Sir-Ben ("Nebraska" spelled backwards). This organization is composed of upwards of 1200 business men of the city, who subscribe to an annual fund with which to construct floats representing, usually, mythical subjects and lighted by myriads of incandescent lamps, the power for which is obtained from the trolley wires used by the street motors. These parades, which occur nightly during one week in September, have been pronounced time and again as far more resplendent than the Mardi Gras exhibitions of New Orleans, though the Omaha festivities are not widely advertised. Hitherto, \$50,000 have been spent annually in floats, with from \$15,000 to \$20,000 additional for the grand ball which closes the festival season. This year, it is said, the amount expended will reach close to \$100,000 and the parades will eclipse all previous representations.

Two hundred thousand visitors have annually been attracted to the city by these festivities, and as they will be more widely advertised this year it is expected the crowd attending will be something enormous. The jewelers are preparing themselves for these crowds by endless quantities of unique souvenirs and will do a thriving trade.

Besides this matter of entertaining out-of-town people, the Omaha wholesalers are making frequent trips in a body to interior towns, becoming acquainted with the new trade and working up old customers to the point of replenishing their stocks. In this way they are bringing much trade to the city that would go elsewhere.

Another indication of prosperity for the jewelers is in the tendency shown on the part of firms or companies from other points to locate establishments in this city. During one week in July the accessions to the business interests of Omaha consisted of one wholesale dry goods house and clothing factory, which, as soon as its new building is completed, will employ upwards of 200 hands; a tannery, which will quickly grow into magnificent proportions, owing to the fact that the hides are obtainable in this city from the great packing houses located here; a hat and cap factory and wholesale house; a glove and mitten factory, and a boot and shoe factory, which, when construction work planned last have been completed, will employ 200 or more persons.

Further than this, building construction is resuming since the reduction in price, and architects are now busy completing plans for over \$2,000,000 worth of residence and small business blocks, construction of which has been

in abeyance for more than a year, owing to prevailing prohibitive prices for materials.

With all these matters before them, Omaha and Nebraska jewelers are rubbing their hands in glee at the profits which will roll in on them this fall. In the meantime they do not complain of present business, saying it is above the average summer trade.

Soren Jonason, the pioneer jeweler of Omaha, has sold out his stock and with his son has started for Cape Nome, Alaska, where he will again enter the jewelry business, doing a little "prospecting" on the side. Mr. Jonason had a valuable stock, but it was in old-style ware and not readily salable. For this reason he has been doing little over paying expenses the past year or two and concluded to sell his stock at a lump price and start elsewhere with a new stock. A local department store bought what was left after the daily auctions were concluded.

A. Mandelberg, a Farnam Street retail jeweler, went during July to Kansas City, Buffalo and New York City to learn if he could gain wealth more readily by locating a first-class jewelry store in one of those cities. He came back to Omaha more than ever satisfied that this is "the best place on earth."

P. E. Flodman, of P. E. Flodman & Co., local retail jewelers, is taking his first vacation in twelve years. He is fishing in the Wisconsin lakes.

A. F. Smith, president of the Reichenberg-Smith Co., wholesalers, at Omaha, made a trip through Nebraska during July and found that business needed little, if any, stimulus, especially since the recent rains.

J. G. Best, a jeweler, of Hartington, Neb., has been honored with an election to membership in the school board. He was in Omaha recently as a buyer.

W. S. Collette, a jeweler of Bancroft, Neb., was one of the alternate delegates from Nebraska to the Democratic National Convention, at Kansas City. He looked over stocks there but returned to Omaha to buy, which Omaha merchants look upon as another feather in their caps.

H. E. Dunning, of Fremont, Neb., a retail jeweler, attended the initiation ceremonies of the Knights of Ak-Sir-Ben, at Omaha, the latter part of July and became so enthused that he intends to bring a large delegation to the next meeting.

Louis Reichenberg, of the Reichenberg-Smith Co., of Omaha, has returned from a two-weeks' visit to New York and other Eastern points. W. H. Mulhaupt, salesman for this company, has started on the Southern, and R. R. Marsh on the Western route.

L. T. McHugh, of Blanchard, Iowa, was a recent Omaha buyer.

S. W. Lindsay, a Douglas Street retail jeweler, with his family, has gone to the Minnesota lakes for a summer vacation.

Mr. Borsheim, of the firm of Brown & Borsheim, has gone to the Wisconsin lakes to lure the finny tribe to his net.

Mr. Lawson, watchmaker for T. L. Coombs & Co., Douglas Street retail jewelers, has gone to Manitowish for his summer's outing.

C. L. Shook, of C. L. Shook & Co., of Omaha, while at Lincoln the latter part of the month, was stricken with a temporary illness, but has returned home and is able to pursue his business.

Henry Lusen, of Bercford, S. Dak., is taking a course at the Omaha Watch Repairing and Engraving Institute.

Carl Stroehler, of Stanton, Neb., who, besides being a jeweler of prominence, is agent for a gasoline motor concern, was an Omaha buyer the latter part of July.

The Reichenberg-Smith Co., wholesalers at Omaha, has put in a glass-cutting plant and will turn out some handsome original designs in cut glassware.

Alfred Brodgaard, a brother of Fred Brodgaard, the other points to locate establishments in this city. During one week in July the accessions to the business interests of Omaha consisted of one wholesale dry goods house and clothing factory, which, as soon as its new building is completed, will employ upwards of 200 hands; a tannery, which will quickly grow into magnificent proportions, owing to the fact that the hides are obtainable in this city from the great packing houses located here; a hat and cap factory and wholesale house; a glove and mitten factory, and a boot and shoe factory, which, when construction work planned last have been completed, will employ 200 or more persons.

Further than this, building construction is resuming since the reduction in price, and architects are now busy completing plans for over \$2,000,000 worth of residence and small business blocks, construction of which has been

in abeyance for more than a year, owing to prevailing prohibitive prices for materials.

With all these matters before them, Omaha and Nebraska jewelers are rubbing their hands in glee at the profits which will roll in on them this fall. In the meantime they do not complain of present business, saying it is above the average summer trade.

Soren Jonason, the pioneer jeweler of Omaha, has sold out his stock and with his son has started for Cape Nome, Alaska, where he will again enter the jewelry business, doing a little "prospecting" on the side. Mr. Jonason had a valuable stock, but it was in old-style ware and not readily salable. For this reason he has been doing little over paying expenses the past year or two and concluded to sell his stock at a lump price and start elsewhere with a new stock. A local department store bought what was left after the daily auctions were concluded.

A. Mandelberg, a Farnam Street retail jeweler, went during July to Kansas City, Buffalo and New York City to learn if he could gain wealth more readily by locating a first-class jewelry store in one of those cities. He came back to Omaha more than ever satisfied that this is "the best place on earth."

Pearl Hunting Along the Mississippi.

Pearls are being found along the Mississippi in increasing abundance, and few are aware of the extent and promise of this long-neglected industry. The following interesting account of the industry was furnished to *The Masticator Journal*, Masticator, Iowa, by Chas. S. Crossman, of New York, who is a recognized authority on precious stones:

The industry of pearl hunting has been going on in these parts, or rather to the north of here, for over ten years, says Mr. Crossman, but only recently has it developed to its present magnitude. Eastern houses are luring the pearls from every city and town along the river and have regular buyers employed for that purpose alone. The slug, which is so common in these parts, is comparatively unknown in the East, and many of the big jewelry houses don't know what a slug looks like, but it will not be long until those slugs will be used in the making of cheap jewelry all over the world. When asked whether or no, the Western fresh water pearl was as valuable as the oyster pearl, Mr. Crossman said that it was not, but that he would want to be better posted before he made a statement concerning the relative values of the two pearls, and he promised to get a statement of authority on the subject and send it to the *Journal* at some future date. This morning Mr. Crossman was on the river with one of the clam fishers and he said that he never before understood the industry so well as he took the trip.

Comparatively speaking there are very few large pearls found in this vicinity, but north near Prairie du Chien the pearl hunter finds a mammoth pearl now and then, and the clam fishers say there is a reason for this. They say that the shells around the towns in the north are older and that these shells are not so good for buttons as those found in the waters of the Mississippi at this and other points south. It appears that the beds are young here and the pearls have not the time to develop as they have in the shells that are ten to twelve years old. The old shells, as found in the north, is much larger, but when they are struck together in many instances they will break in pieces, showing that they are old and you might say, really, that the shell found in the river near Masticator and vicinity is smaller, not so old, but for the best shell for the button industry. On the other hand, the shell of the age is found to reveal a monstrous pearl when opened than are the younger shells. Clam fishers in his vicinity, so Mr. Crossman observes, have concluded that the pearl is such a rarity that they do not bother about looking for them.

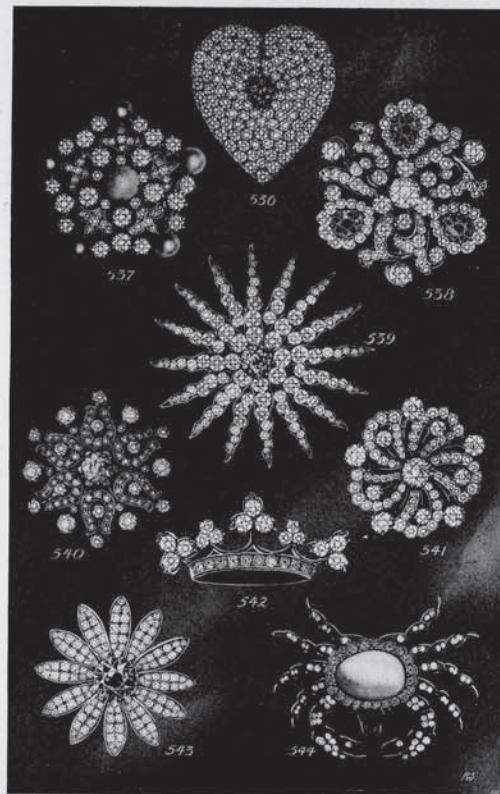
Four Phenomenal Auction Sales.

Jewelers' Auctioneer Sam Martin Performs Magic Feats with his Talmusian Hammer.

Elbert Hulbush, in expatiating on the grit and thoroughness of the enterprising Jeweler, delivered McKinley's famous "message to Garcia," exclaimed in his enthusiasm "By the eternal, there's a man!" Many a jeweler who has watched Sam Martin auction off "immovable" stock at a big profit and "movable" stock at a bigger, felt like exclaiming "with like enthusiasm." "By the eternal, there's an auctioneer!" Among the firms whom he made happy in recent months were Russell Bros., Weatherford, Texas; A. W. Ford & Son, Freeport, Ill.; Chapman & Jackson, Norfolk, Va.; and A. H. Richards, El Paso, Texas.

Four had magnificent stocks in fine condition, circumstances which exactly suited the versatile Martin, and all four firms were only too eager to tell to their brethren in the trade the golden results of the sale. Whether from the point of view of the time of the sale, the value of goods sold, or the profits made, all four sales were magnificent successes, and four other firms have been added to the now elongated list of jewelers who "revere by Martin."

The phenomenal auctioneering feats of Martin are well known to the trade. When dramatist Otto Broad and his show struck the same town simultaneously with Martin and his auction, the actor magnanimously paid tribute to the genius of the hurricane auctioneer who had half the town around the store. Rival attractions are only a stimulus to Martin's genius, and he has the unique gift of turning all local happenings from a circus to a revival meeting to the benefit of his auction. His oratorical versatility is remarkable. Last month, at the Elks' Grand Lodge Conventions at Atlantic City, N. J., in the contest of cities for the next convention, Past Exalted Ruler Martin won for Milwaukee in a walk. No inducements or button-holing by rival could overcome the perspicacity, suavity, force and charm of Mr. Martin's personality and eloquence.



YOUR BUSINESS WILL BE BETTER



YOU SELL WHAT IS KNOWN TO BE THE HIGHEST GRADE IN QUALITY, STYLE AND MANUFACTURE. There is no better way of knowing about our new Fall line than by looking it over in its entirety. This you can do when you come to the National Encampment of the Grand Army of the Republic, which convenes in Chicago this year from August 25 to September 1, inclusive. If you cannot come to market on this occasion, you will likely take advantage of the reduced railroad rates to Chicago afforded by the meetings of the Merchants' and Travelers' Association during August, September and October, particulars of which are given in the news columns of this issue of THE KEYSTONE. When we say "you" we mean that all wide-awake jewelers are coming to market this Fall, and we take this opportunity to say—call and see us. Our doors are always open, and you are always welcome. Make our office your headquarters while in Chicago, and do not forget our invitation.

ESTABLISHED 1854
INCORPORATED 1893

JUERGENS & ANDERSEN CO.

DIAMOND IMPORTERS AND MAKERS OF FINE JEWELRY

STEWART BUILDING—CHICAGO

NEW BLOOD

A **BUSINESS** as well as a **MAN**
is measured by the **HEART BEATS**

Let us put you on
Our list for
Trade Winners and Advertisers
Out August 15th.
Costs you nothing.

We are keeping the **HEART BEATS** of our **Business**
fresh and vigorous with **Young Blood**.

We have the **LINE**
and
We have the **MEN**

Elgin and Waltham Watches, Diamonds, Watches, Clocks,
Silverware, Cut Glass, Tools, Material, and in fact
Everything and anything needed by Jewelers.

All we need is your order to
prove Our Efficiency.



READY FOR A RUN

We are **Always Ready** for a **Run**
on Goods that **Move**.

Our Selections Increase Your Sales,
and Always Look Tasty and Attractive.

Send us your orders for anything and everything,
and watch results.

A postal card
will bring you
Trade Winners
and Advertisers
Out August 15
1900

Norton-Paulson Jewelry Co., Incorporated,

Successors to

J. A. Norton & Son

Kansas City, Mo.

Established 1873

The House of ROBERT JOHNS

196-200 Monroe St. Cor 5th Ave & Monroe, CHICAGO.

HEAD-
QUARTERS
for all
NEW
THINGS
in
Popular
Priced
Jewelry &
Novelties

Now
Offering
Some
Attractive,
High Grade,
Recent
Creations
in Ebony &
Sterling
Silver
for the
Fall
Trade.



Beware of Imitation, or
two price ebony. Wide
experience has taught us
that this will not give sat-
isfaction. Ours is solid, im-
peccable ebony. Sterling
mounted.

Hair Brushes	.....	\$6.75 per dozen.
Comb Brushes	.....	9.00 "
Clash Brushes	.....	8.00 "
Military Brushes	.....	10.50 "
Mirrors	.....	6.75 "
Solid Ebony Manicure Pieces	.....	23.50 "
	.....	3.00 "

Prices
almost
as
low
as
for
imita-
tion

STERLING SILVER NOVELTIES



MANICURE PIECES,
\$1.75 to \$7.50 per dozen.

These include Nail Files,
Tooth Brushes, Hair Curlers,
Button Hooks, Tweezers, etc.
Many styles of Combination
Sets. Complete assortment of
Belts,
Letter
Openers,
Scissors,
Match
Boxes,
Stamp
Boxes,
Whisk
Brooms,
Rimnet
Brushes,
etc.

All silver work chaste, tasteful and attractive.



Glassware

STERLING TOPS

Vaseline Jars
Puff Jars
Salts and Peppers
Pungents
Tooth Powders
Sugar Shakers
Etc.

Tops handsomely ornamented
with chasing.

CLARKE HELME LOHMIS, CHICAGO



WESTERN BUREAU OF THE KEYSTONE,
ROOM 211, COLUMBIA MARSHALL BUILDING,
CHICAGO, JULY 26, 1900.

We have entered on the last half of the year with a prospect of a fall trade that will equal, if not surpass, the record-breaking fall season of '99. It is a little too early to predict with complete assurance, as the harvest throughout the Northwest will not be completed for four or five weeks to come, and meanwhile there may be some changes of conditions that will largely affect trade. In the Southwest and West things are different. In the first-named section the harvest is now over and the quality and quantity of the wheat crop leave nothing to be desired. The latest threshing returns from Kansas, Oklahoma and Nebraska indicate the finest quality of wheat. The reports from Missouri, Iowa, Colorado and Wyoming, which we give elsewhere in this letter, are equally encouraging with those from Kansas, Nebraska and Oklahoma. We are glad to note that the copious and general rains of the past three weeks throughout the Northwest have changed the aspect of affairs entirely in that section and the reports now coming in are as cheerful as they were despondent a month ago. The farmers were then almost afflicted with a panic, the country dealers were all at sea as to what they should do as to fall purchases and the jobbers in the cities were chiefly occupied listening to "hard-luck" reports which reached them from the country. While it was said that no amount of rain could save the wheat crop, this has happily proven a mistake, and from one-half to two-thirds of the crop is predicted for Minnesota and the Dakotas, while the increase in price for all farm products makes the yield amount to about as much financially as last year's splendid crop. The Northwestern stockmen were in the dumps over fodder, but the rain has given new life to the pastures, which will enable a cut of short grass yet to be made, and thousands of acres of fodder corn have been planted, so that live stock will not have to be sacrificed, as it was feared. Business is again good in the drought country and there is every indication that it will continue so right along through the fall and winter. Here in Chicago vacations are being enjoyed by housemen as well as traveling salesmen, and the usual lull due to the season has prevailed until the past week. A large number of traveling representatives started out on the road from the 15th to the 20th inst., and they are already being heard from pretty freely. It is now said that jobbers' sales will exceed those of last July. Collections are fully up to expectation and to the average of past seasons.

Kansas has just finished harvesting the largest wheat crop in her history, estimates by crop experts, ranging from 80 million to 100 million bushels. The farmers expect to get 60 million dollars for this crop, or only 20 million less than the entire amount of agricultural products of the State sold for four years ago. The State corn crop is as yet an unknown quantity. It was thought three weeks ago there would be a total failure of this crop, but copious rains have fallen in the corn belt,

and it is now estimated that there will be one-third to one-half of a normal crop, or from 100 million to 150 million bushels. There were 27 million bushels of wheat raised in Kansas in 1896, which sold for \$13,251,193. The entire wheat yield of the State from 1872 to 1896, inclusive, was 171,387,077 bushels, or less than twice the amount of the present crop. The total valuation of the live stock owned in Kansas in 1896 was \$7,356,900, while the live stock of the State in this year about \$16,509,072. The total valuation of all crops raised in 1896 was 80 million dollars, while this year it is expected to be \$175,600,000. These conditions make prosperity general throughout Kansas this year. There has been no total failure of crops in the last four years. The farmers have paid their debts and majority now have substantial bank accounts. The outlook for fall trade in this State is certainly bright.

General business conditions are good in Wyoming, according to late reports, in fact never were better. The people of that State are enjoying what they call "unprecedented" prosperity. The population of the State has increased over 50 per cent since 1890. The crop conditions are fair. All portions of the State were favored with a heavy growth of grass in the early summer, but a drought, which is now on over some portions, has dried the grass up much earlier than usual. Crops of small grain in most portions are excellent, while in a few sections they will fall short of the average. About 3,000,000 head of sheep have just been shorn. The clip, aggregating 26,000,000 pounds, places this State in the lead as a wool-producing section. A goodly portion of this vast amount of wool is stored in local warehouses, and is held for an advance in prices. The growth of the cattle business during the past four years has been second only to that of sheep and wool, and Wyoming now has almost as many cattle as during the palmy days of the range business in 1886. Few of the large herds of those days remain, the holdings now being divided up in small bunches and confined in pastures. Upwards of 500 laborers are employed on railroad construction work in this State. The Burlington is building two lines across the State, the Colorado & Southern one line, and the Union Pacific is shortening its road through Wyoming. Money is plentiful, and laborers for haying, railroads, mills and the shops are scarce.

Traffic with the Alaskan gold country, the Hawaiian Islands, and the Orient has made markets for products and stimulated trade in all lines in the State of Washington and the Pacific Northwest, writes a business man who is making a general trip through that country. Washington is enjoying a season of substantial prosperity in all lines of industry, after a dull period following the collapse of the boom of 1892. Crops are good all over the State, and farmers have paid off mortgages and now have more money than ever before. This is caused by the big wheat crop at high prices in 1897, and the partial recovery in business due to the Klondike gold discovery the same year. Wheat, lumber, coal and fish, the four principal products of the State, will reach \$40,000,000 this year, against \$20,000,000 in 1896. This year's wheat crop will reach 30,000,000 bushels, at 40 cents in the field, or 55 cents at the seaboard, against 11,000,000 bushels at about the same price four years ago. A much larger percentage of wheat now goes abroad as flour, many new mills have been established. Lumber and shingles, including manufactured lumber, will reach \$14,000,000, against \$5,000,000 in 1896. The coal output is 1,500,000 tons, more than 500,000 tons greater than in 1896, and many new mines are being opened up. The fisheries output is more than \$7,000,000, including canned salmon, fresh frozen fish, oysters and clams, against \$3,000,000 four years ago. The gold and copper products will be \$2,000,000; four times greater than four years ago.

About this time last month a good Northwestern crop many doleful reports were emanating from the Northwest because the wheat crop, as well as every other crop, was burning up from drought. The later reports from this section since the fine and general July rains, are that the first reports of crop damage were greatly exaggerated. An expert who has been over Minnesota and the two Dakotas gives his opinion that the yield of wheat in those States will yield at the very least 135,000,000 bushels. Last year the yield was 210,000,000. If favorable weather comes in the next few weeks the yield will reach 150,000,000. The difference in price between wheat last year and this will almost make up the loss in yield. It must be remembered that the crop last year was far above the average, and that it brought an unexampled prosperity to the Northwest.

Between the yield and the price this year promises to be still a good average. A returning traveler who has covered Northern Minnesota and North Dakota thus gives the situation: "The recent rains in North Dakota and Northern Minnesota have worked a wonderful transformation, and the feeling everywhere is very much better than I had any idea it would be. Last crops will show a large yield in all northwestern sections, and wheat will show a much better yield than was at first expected. I learned that most of the farmers are in comfortable circumstances all through that section, while many of them are rich, and the loss of a crop, while it would make them discouraged, would result in comparatively no hardships for a large majority of the farmers. I made it a point to talk with many of the farmers and I find that a summer have held wheat back from last year, which they are ready to sell whenever the price gets where it meets their view. I asked one farmer what he was holding his wheat for, and his reply was a characteristic one. 'Well,' he said, 'we have discovered up here that there is a Letter comes along once in about every three years, and I am holding it for the next Letter.' This is the way with a great many of the farmers; they have wheat back, and they are waiting for a Letter to come along and boost prices up to a high point. That class of farmers won't suffer much by reason of one poor year, and I heard far less complaint than I expected to hear. Hay is the poorest of any of the crops, especially upland hay, but from the conversation I had with the farmers I do not anticipate they will suffer much for the lack of feed. Much of the poor grain will be cut and used for feeding purposes, while straw will also be used very extensively. Flax straw, I understand, is good feed, especially for sheep, and it will be used where hay is a poor crop. Most of the farmers there now are engaged in stock raising as well as in wheat and flax farming, and if they can fatten their stock and put it in shape for market they will have no difficulty whatever in getting through the winter in fine shape. The trip was very satisfactory to me, and I returned with a much better knowledge of the exact situation than I could have obtained in any other way, and with a great deal more confidence in the vast resources of our great Northwestern States."

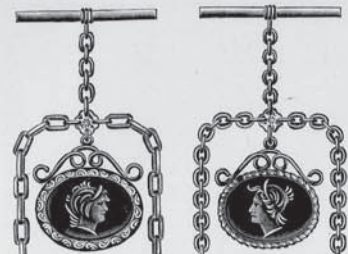
Everybody who has ever traveled in Missouri as a Fruit Country. Missouri knows that it is a great apple country. THE KEYSTONE man spent a few days in that State recently. He learned that the apple crop this season would be a fairly good one, though hardly up to the record-breaker crop of 1897. Here is the way they talk about the fruit business out there, and we give it as an interesting bit of commercialism. A prominent fruit grower said: "The apple crop is sometimes a failure in Missouri, but our farmers are too intelligent to be caught with their eggs all in one basket. The average fruit grower has about one-fourth of his farm in apples; the rest is devoted to general agriculture. It is on account of its diversified farming that the State of Missouri holds the high rank it does with its agricultural product. You will remember that Missouri took more fruit prizes at the World's Fair in Chicago than any other State in the Union, and did the same thing at Omaha and New Orleans. At Paris now, with the single exception of New York State, Missouri has the finest display of fruits, although it has not had a good apple crop since 1897. The indications are that this year will prove a good one for the apple grower; some say it will be a record-breaker, enough so that our farmers will have money to burn. I knew of a 135 acre orchard in 1897 whose crop brought \$65,000, and from present indications there are many orchards in the State which will do equally as well as this year. This is one reason why there is nothing the matter with Missouri."

An extraordinary crop in Nebraska has been assured by the general rains of the last two weeks. Her splendid wheat crop will have been completely harvested by the first of August if all the seed required for the service can be secured and prosperity throughout that section of the great West is increasing daily. Railroads are working their crews over time, and the general volume of business is estimated to be at least 30 per cent above that of last year, which was a record-breaker for volume of business. The corn fields of Nebraska in 1896 included 7,510,113 acres, while the yield was 265,244,824 bushels. The corn acreage is 8,362,000 acres this year, and the estimated yield is 310 million bushels. The wheat yield of 1896 was 35 million bushels, and this year it is estimated at 56 million bushels. At no time in the history of Nebraska has so many persons been working at such high wages.

(Continued on page 796.)

When it comes to writing about JEWELRY, CLOCKS, DIAMONDS

and the like, no one can excel us. Below are a few quotations to substantiate our claim.



GENTS' DICKENS VEST CHAIN.

The Admiral, warranted 14 K. gold filled, polished Boston links, genuine hand-cut medals and stone charm.

No. 2300. Price, each, \$1.10.



GENTS' DICKENS VEST CHAIN.

The Admiral, warranted 14 K. gold filled, polished Boston links, genuine hand-cut medals and stone charm.

No. 2301. Price, each, \$1.25.



GENTS' DICKENS VEST CHAIN.

The Admiral, warranted 14 K. gold filled, polished single open curb, gold soldered links, genuine hand-cut medals and stone charm.

No. 2302. Price, each, \$1.25.



GENTS' DICKENS VEST CHAIN.

The Admiral, warranted 14 K. gold filled, polished single open curb, gold soldered links, genuine hand-cut medals and stone charm.

No. 2303. Price, each, \$1.25.

PRICES
QUOTED
ARE
NET
CASH



THE MARTHA WASHINGTON CHAIN.

Length, 22 inches. Gold filled, extra quality, polished fancy gold soldered links, large polished heart shape locker, to hold a picture. Set with assorted fancy colored stones.

No. 2304. Price, each, \$2.00.

THE GRISMONDA CHAIN.

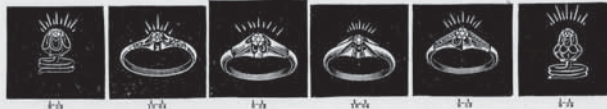
Length, 28 inches. Best quality rolled plate, polished fancy soldered links, large colored painting on fine pearl charm.

No. 2305. Price, each, \$1.50.

A Big Drive in DIAMONDS

of our recent purchase in Europe.

No. 506. Crystal White Perfect Diamonds, mounted in 14 K. gold settings; average total weight, $\frac{3}{4}$ C., price, \$61.50.



A GENUINE CLOCK BARGAIN.
Seth Thomas Adamantine Clock.

Eight-day, half-hour strike, cathedral bell, fine gilt trimmings and ornaments, fancy gilt dial, Arabic figures, case, 21 inches; dial, 5 inches; height, 28 inches. Regular selling price, \$4.45.

No. 2508. Our price, while they last, \$3.95. In lots of 3 dozen or more, \$3.75.

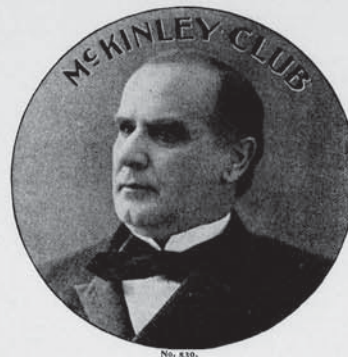


Scarf Pin.
1-1/2 gold.
Rose gold finish;
emerald eyes.
No. 2306.
Each, 30c.

Scarf Pin.
Rolled plate.
Rose gold
finish; ruby
eyes.
No. 2307.
Each, 25c.

Scarf Pin.
Rolled plate.
Rose gold
finish; ruby
eyes and
mouth.
No. 2308.
Each, 25c.

Handsome Photo. Campaign Buttons



No. 520.



No. 520.



No. 511.



No. 502.



No. 514.

PHOTO. BUTTONS are reproduced from the latest photographs of the various candidates. Have a highly-polished surface, true in every detail, and equal to the best of photographic work. All have the safety lock pin which holds them securely.

No. 530. Either McKinley or Bryan, all plain, no wording on photo, has safety pin, also easel back which can be removed.

No. 520, 511, 514, 502 come with single portraits of McKinley, Bryan and Rough Rider, and of President and Vice-President candidates, pin back.

No. 530. Plain, no wording, 2 styles, \$4.00 a dozen.

No. 520. Plain, no wording, 5 styles, \$1.50 a doz.; \$15.00 a gross.

No. 511. Plain, no wording, 5 styles, 75c. a doz.; \$7.50 a gross.

No. 502. With wording, Rough Rider, 5 styles, 40c. a dozen; \$4.00 a gross.

CHEAPER GOODS ON REQUEST.



No. 5272.

No. 5272. In silver or gold, size of cut, plain, \$2.00 a doz.

No. 427. In silver, Roman or English gold, half size of cut, plain, 2.25



No. 1223.

No. 1223. In gold only, like cut, set with pearl, opal or turquoise, \$1.50 a doz.

No. 1224. In gold only, excepting all plain, with same setting, 4.50

Ball Tie Holder

Very Popular
EVERYBODY WANTS ONE

The 20th Century Tie Pin

A POPULAR NOVELTY

A NEW FAD

A HOT SELLER



Come put up one dozen on a handsome pad, with imitation necktie, and look no per cent better than shown by cuts. The swiftest pin in the market. Come in gun metal and gray, with gold trimmings. They sell at night! don't pass them. Four designs assorted on each pad. Price, \$2.25 a dozen.

A Swell Line of Ladies' Sterling Tie Holders

Jeweled Hair Clasps



No. 2420.
Sterling Silver Tie Holder,
\$4.00 a dozen.



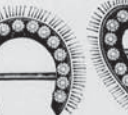
No. 2427.
Sterling Silver Tie Holder,
\$4.00 a dozen.



No. 2428.
Sterling Silver Tie Holder,
\$2.25 a dozen.



No. 2426.
Sterling Silver Tie Holder,
\$2.25 a dozen.



No. 2428. Brilliant
Horseshoe Hair Clasp,
in shell only,
\$7.50 a dozen.



No. 2429. Brilliant
Heart Hair Clasp,
in shell only,
\$7.50 a dozen.



No. 2427. Brilliant
Crescent Hair Clasp,
in shell only,
\$6.00 a dozen.

J. Floersheim, Kunstadter & Company

Manufacturers and Importers of Novelties and Jewelry

ESTABLISHED 1872

243-245-247 Adams St., N. E. Cor. Market St., CHICAGO, ILL.

A. C. BECKEN, 103 State Street, Chicago, Ill.

After All is Said

It is the House and the extent and merit of its lines upon which so much depends. All the advertising one can do will not give merit to inferior goods. We are careful first, to procure reliable articles—then, advertise them as such, and back up our "ad" with our reputation.

We are sticking to the plain, hard, old method of merit. The steadily increasing business that's coming here from every State in the Union shows it. We want your business, but much prefer to deserve it. Then you'll stay with us.

Our Fall stock is now complete and most extensive. Complete assortments are an advantage to every buyer.

We publish each year two large, separate and distinct Catalogues, each profusely illustrated, one listing our lines of Diamonds, Watches, Jewelry, Clocks, Silverware and Optical Goods; the other listing Watchmakers' Tools and Material and Jewelers' Findings and Supplies. Both of these handsome and useful Catalogues we send free of expense to the Jewelry trade only. If you do not possess them, advise us.

It is decidedly to your interest to see our stock when you visit this market. Jewelers taking advantage of the reduced rates to the National Encampment of the G. A. R., this month, and the Merchants' and Travelers' Association excursions during August and September, are invited to make our store their headquarters during their stay in Chicago.

BENJ. ALLEN & CO.

Chicago

The
Silversmiths' Building



Chicago News.

(Continued from page 798.)

Prosperity Abounds in Colorado
Reports from Colorado are full of good-time stories. Returning travelers tell us that prosperity abounds on all sides out there, and that there is not a single industry languishing in the State. The only question from the farmer to the machinery manufacturer, is how to produce enough to keep pace with the demands. Labor is in great demand. The railroads recently advanced wages of unskilled men of the section 25 per cent. On the Western slope of the Rocky mountains, the farmers have taken to kidnapping tramps and stealing section men whenever the crops demand immediate attention to save them from loss. In all cases this labor is well paid. The agricultural outlook never was better. Fruit, grain, hay, vegetables and live stock have all prospered until it seems as if the farmer would revel in greater wealth than he has ever had. To add to the farmer's prosperous outlook, prices are now higher than ever.

There can be no doubt but what prosperity is general throughout Iowa. Compared with this date in 1896, 300 cultural manufacturers, banking and general business are wonderfully improved. The cereal crop of the State aggregated 415 million bushels, considerably above the average for the past ten years, but the total value of the cereals and other farm products that year was only 133 million dollars, while the average for the last ten years has been 174 million dollars and the total estimated value of the present crop is 207 million dollars. Bank deposits are another index of the prosperity of the State. Iowa is essentially a State of small banks, patronized by farmers and small business men. They were, on June 30, 1896, 370 savings banks. Now there are 450. These banks, on June 30, 1896, reported total assets of \$92,532,227.36, and total deposits of \$60,820,032.21. The reports for June 30, 1900, are not complete, but on February 13th a statement was made, showing assets of \$105,518,606.79 and deposits of \$82,277,739.50, and the showing will be considerably increased when the June 30th statement is issued, as the number of banks are increased by twenty. National banks in Iowa show a corresponding increase in assets and deposits. Iowa land in a large section of the State has increased in market value \$10.00 an acre in four years. In the newer sections of the North and Northwest—nearly one-third of the State—the average has been \$15.00 an acre. The present year has seen an advance of from \$3.00 to \$5.00 an acre in this section. Wholesale and retail trade is now prosperous, and attendance at the Colleges and Universities of Iowa has increased 30 per cent. in four years.

Reduced Rates to Chicago for Jewelers

meetings to be held this fall. Dates for all gatherings have been settled upon, and the lines in the Western Passenger Association have authorized a general round-trip rate of one and one-fifth fares, and the lines of the Central Passenger Association the same, at one and one-third fares. The meetings of this Association will afford the jewelers of the West an excellent opportunity to visit Chicago, and select their fall bills, and see the sights of the Western Metropolis at the same time. These meetings will be held as follows: August 15th to 15th, August 22d to 25th, September 5th to 12th and September 19th to 26th. Members of the Merchants' Association have great expectations as to the ultimate results of the four meetings to be held in this city. The total attendance of the merchants and dealers from towns within the territories of the Central and Western Passenger Associations is expected to be considerably larger than that of any former series of gatherings. The jewelry trade is represented in the membership of the Merchants' and Travelers' Association by the following wholesale houses: Benj. Allen & Co.; H. F. Hahn & Co.; C. H. Knights & Co.; Lapp & Fieshem and dealers from Chicago, any of whom will be glad to give full particulars to any jeweler who may write to them in regard to these meetings, the dates for selling tickets and whatever other information they may desire.

The railroads are co-operating to make the G. A. R. Excursion the National Encampment of the Grand Army of the Republic, to be held in Chicago from August 25th to September 1, 1900, a great success from the standpoint of bringing people to the city. Many jewelers and opticians

will like to make notes of the reduced rates and dates for buying tickets and returning, and THE KEYSTONE prints this information for their benefit. The Western Passenger Association whose territory is divided into the Eastern committee and Trans-Missouri, announce a rate of one fare for the round trip with minimum rate of \$4.00 from territory described below, except that open rate of fare and one-third for the round trip will apply from points which the local one-way rate to Chicago is \$3.00 or less. Tickets will be on sale from points shown under Eastern committee territory, within a radius of 200 miles of Chicago, on August 25th to 30th inclusive, and from points shown beyond a radius of 200 miles of Chicago, August 25th to 29th inclusive. From points shown under Trans-Missouri territory, east of the eastern State lines of Colorado and Wyoming, on August 24th to 29th inclusive. From points in Utah, August 23rd and 24th. All tickets will be good to leave Chicago without execution on any date up to and including September 1, 1900. Tickets sold from points in the territory shown above, under Eastern committee and Trans-Missouri territories, beyond a radius of 200 miles of Chicago, will be extended to leave Chicago up to and including September 30, 1900, by depositing same with joint agent at Chicago on any date, August 25th to noon, September 2d inclusive, and upon payment of fee of fifty cents at time of deposit. The territory from which this rate applies in the Eastern committee is: Illinois, on the west of the Illinois Central railroad, Chicago to Gibson; the Wabash railroad, Gibson to Decatur; the Illinois Central railroad, Decatur to Pana; the C. C. & St. L. railway, Pana to Litchfield, and the Wabash railroad, Litchfield to St. Louis. Wisconsin, Northern Peninsula of Michigan, Minnesota, North Dakota east to the meridian at which the Missouri river crosses its Southern boundary line; South Dakota east of the Missouri river, Iowa and Missouri on the north of the St. L. & S. F. railroad, following its Vinita line west of Springfield. The Trans-Missouri territory includes South Dakota, west of the Missouri river, Nebraska, Kansas, Oklahoma, Indian Territory, Colorado, Wyoming and Utah. The Central Passenger Association, whose territory is bounded on the east by a line drawn through Toronto, Buffalo and Pittsburgh, on the south by the Ohio River, including Louisville, and on the north by Lake Michigan, announces a rate of one cent per mile per capita, short line distance, for the round trip, tickets to be sold from Saturday, August 25th, until Wednesday, August 30th, inclusive, and to be available for return passage to and including Friday, August 31st, after having been stamped and signed by the joint agent of the Chicago terminal railroads, to whom a fee of twenty-five cents must be paid on each ticket at time it is presented for execution. By depositing these tickets with the joint agent before 12 o'clock noon of Sunday, September 2d, and payment of a fee of fifty cents at time of deposit, the return limit may be extended to leave Chicago not later than September 30th. In addition to the foregoing arrangements, tickets will be sold from points within a radius of seventy-five miles of Chicago from August 25th until August 29th, inclusive, good going only on date of sale and returning for not more than two days from date of sale at the same rate (one cent per mile), but without requiring the passengers to appear before the joint agent to have their tickets executed. From Eastern and New England States, which are included in the territory of the Trunk and New England Passenger associations, tickets will be sold at one fare for the round trip, except that from points in the vicinity of the western terminal of the Central Passenger Association, where double local fares or regular excursion fares to such terminal added to fares therefrom make less than one fare, the same may be used. From the above described territory tickets will be sold on August 25th, 26th and 27th, and will bear the same conditions as to return limit, including the extension of time, payment of fee for the joint agent, etc., as apply from the territory of the Central Passenger Association.

Here is some mighty interesting reading for the business man, especially the western business man, for it tells about some of the leading products of the great West. It shows how the American hog chases around the world. It also shows that the American steer is quite a globe-trotter, but he is not in the running with his little bristling companion of the feeding lot. The fiscal year just closed has been a record-breaker in exports of products from the farm via the packing houses. Eighteen hundred and ninety-nine was regarded as a phenomenal one, but the past year has exceeded it in the exportation of provisions, the total value reaching \$180,000,000—the largest in the history of the country. For the first eleven months of the year the item of lard amounted to \$38,691,000, and the other hog products of bacon and ham reached \$35,478,000 and \$18,192,000, respectively. Plain pork amounted to \$9,459,000. Of the despised "alo" we sent abroad \$9,409,000 worth that was not needed for the tables of our own boarding houses. Our foreign shipments of beef amounted to \$7,555,000, most of it going to Great Britain, France, Africa and the Orient, each of these countries showing a large increase over the previous year. American cheese is also in greater demand abroad, the increase being more than 6,000,000 pounds.

It is believed that after the harvest of Diversified Farming 1900 shall be garnered and the record of the season in all agricultural lines shall become established, a great many Northwestern farmers will try to plan some method for future operations which shall reduce the chances of individual failures to a minimum. This may be done by diversifying to a greater extent than ever before, producing stock as well as grain, and preparing for both late and early crops, so as to get all the chances possible in the most changeable seasons. It is easy to plan so that even if some yields are disappointing an entire failure, under any circumstances, cannot be possible.

Personal Mention.

James A. Todd, Chicago manager for the Towle Manufacturing Co., writes that he is having a thoroughly enjoyable time on his trip through Europe. He expects to be back home again early in August.

Max Ellbogen, of the Stein & Ellbogen Co., sailed July 18th, on the steamer *St. Paul* for a European trip of business and pleasure. Mr. Ellbogen will first visit the diamond marts of London and Amsterdam, and then do the Paris Exposition.

Miss C. B. Thompson, the able and efficient assistant manager at J. W. Forrester's wholesale establishment, is enjoying a well-earned and much-needed month's rest in the East, spending most of her time at the Pequet House, Martha's Vineyard. Miss Thompson is a bright and capable business woman, and has thoroughly earned her position in the trade by hard, conscientious work. She is accompanied on her trip by a sister.

Travelers who have recently called on Mills & Hupp, the well-known jewelers and music dealers of Streator, Ill., tell us that their new store is one of the gems of the State. Thoroughly modern, bright, attractive and arrangement all that could be desired, it is alike a credit to its enterprising proprietors as well as the town it is located in.

Alex. Macke, the pioneer and well-known jeweler of Lawrence, Kans., is spending the summer in Germany. He will take in the Paris Exposition ere he returns.

Richard Ashby, the well-known jeweler of Colorado Springs, Colo., was in town for a day or two the early part of the month en route to Europe. Mr. Ashby will remain abroad about four months, visiting at his old home in England, seeing the Paris Exposition and other points of interest in Continental Europe. He will combine business with pleasure somewhat, and buy art goods and bric-a-brac for the home store.

H. M. Huseman, who was formerly in the employ of A. C. Becken, but who has lately been working in New York City, was in town the early part of the month on a vacation trip.

Fred. H. Allen, Chicago and Western representative for D. Wilcox & Co., is enjoying a week's outing at Paw Paw Lake, Mich.

James P. Stewart, cashier at C. H. Knights & Co., is at Lake Geneva for a two-weeks' outing.

C. H. Pixley, house salesman with F. A. Hardy & Co., returned last week from a two-weeks' vacation spent among the Wisconsin lakes.

Miss Minnie C. Gray, Mr. Dorrance's faithful assistant in the Chicago office of Simon, Bro. & Co., is enjoying a month's vacation among the hills of New Hampshire.

Edward E. Swadener, house salesman at F. A. Hardy & Co.'s, is at present spending his annual vacation at his old home in Dayton, Ohio.

Henry Peters and Geo. M. Tregay, of the office of the Chicago branch of the Gorham Manufacturing Co., are at present enjoying their annual vacations. W. H. Burton, of the traveling force, is enjoying his summer outing down in Vermont; T. G. Jewett, also of the traveling force, is down in the Old Bay State, enjoying his vacation, and W. S. Willis, still another traveler of this company, is spending a fortnight at the factory.

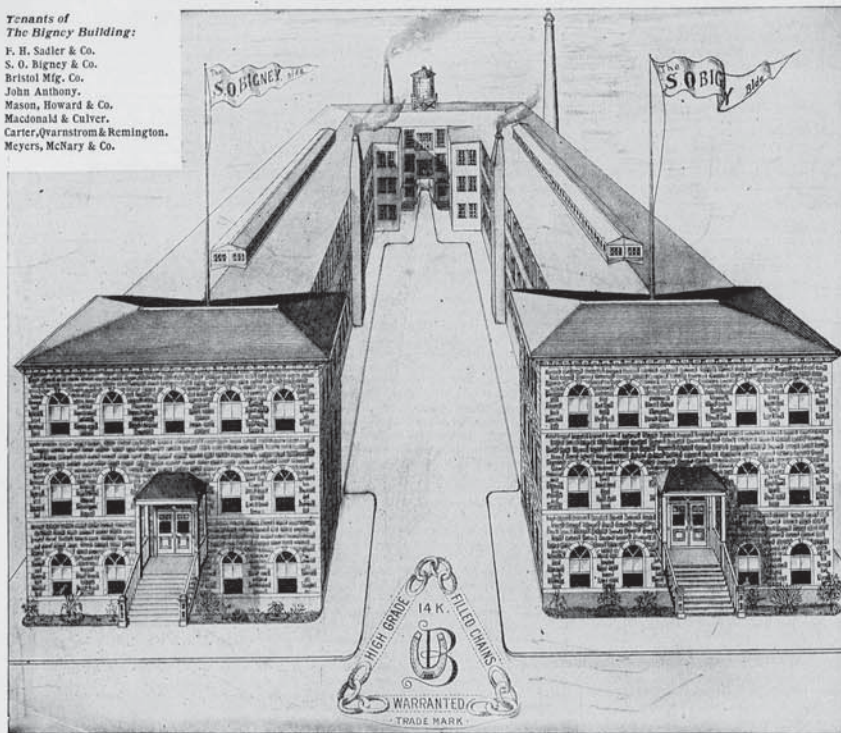
Elmer A. Rich, of the Rich & Allen Co., is combining business with pleasure in a three-weeks' trip through the East. He returns early in August.

(Continued on page 801.)

THE S. O. BIGNEY & CO.'S MAMMOTH JEWELRY PLANT!

Tenants of The Bigney Building:

F. H. Sadler & Co.
S. O. Bigney & Co.
Bristol Mfg. Co.
John Anthony.
Mason, Howard & Co.
Macdonald & Culver.
Carter, Qvarnstrom & Remington.
Meyers, McNary & Co.



LARGEST AND FINEST EQUIPPED PLANT IN THE UNITED STATES.

This is where the renowned **S. O. Bigney & Co.'s Gold Filled Seamless Chains** are made. Every chain is guaranteed. To handle these goods means an increase in your business. Further comment is unnecessary. Ask your jobber for them.

The above trade-mark is a fac-simile of tag attached to all chains made by our house.

The Bigney Vest Fob

for Ladies and Gents, is a Great Seller!

S. O. BIGNEY & CO.

Manufacturers of High-Grade Gold Filled Seamless CHAINS

ATTLEBORO, MASS.

New York Office, 3 Maiden Lane



Come to Market to Buy your Fall Goods

REDUCED RATES TO CHICAGO FOR JEWELERS

In connection with Merchants' and Travelers' Association Meetings and the National Encampment of the Grand Army of the Republic

FALL MEETINGS, 1900 OF THE National Association of Merchants and Travelers AT CHICAGO. DIVISIONS A, B, C AND D

ONE AND ONE-FIFTH FARE

Special Excursion Rates in the territory of the Western Passenger Association, including the following States: Iowa, Wisconsin, Missouri (except on the St. Louis, Iron Mountain and Southern Ry. and the K. C., F. S. & M. Ry. east of Springfield), Kansas, Nebraska, Colorado (from Denver, Colorado Springs, Pueblo and points east only), New Mexico, Arizona, Wyoming (from Cheyenne only); also in Minnesota and North and South Dakota, except on the lines of the Great Northern, Northern Pacific and Soo System, and members on those lines can secure the reduced rates from the nearest points on other lines, Northern Peninsula of Michigan on the C. M. & St. P. Ry. and C. & N. W. Ry. lines; Illinois in Western Passenger Association territory and also along the Illinois Central, the Chicago & Eastern Illinois, the Wabash, the Jacksonville & St. Louis, the Toledo, Peoria & Western, the Chicago, Peoria & St. Louis and the Indiana, Decatur & Western Companies throughout the State.

Also for Texas, Oklahoma and Indian Territory in the Southwestern Passenger Association, the same rate and dates.

First Meeting	Dates for buying tickets, August 4, 5, 6, 7, 8, 9 and 10. Dates for returning, August 8, 9, 10, 11, 12, 13, 14, 15, 16, 17 and 18.
Second Meeting	Dates for buying tickets, August 18, 19, 20, 21, 22, 23 and 24. Dates for returning home, August 22, 23, 24, 25, 26, 27, 28, 29, 30, 31 and September 1.
Third Meeting	Dates for buying tickets, September 1, 2, 3, 4, 5, 6 and 7. Dates for returning home, September 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14 and 15.
Fourth Meeting	Dates for buying tickets, September 15, 16, 17, 18, 19, 20 and 21. Dates for returning home, September 19, 20, 21, 22, 23, 24, 25, 26, 27, 28 and 29.

Central Passenger Association Territory, including Ohio, Michigan (except Northern Peninsula) and Indiana and part of Illinois.

One and One-Third Fare.

Certificates good for returning THIRTY DAYS from date of purchase.

First Meeting	Dates for buying tickets, August 11, 12, 13, 14 and 15.
Second Meeting	Dates for buying tickets, September 1, 2, 3, 4 and 5.
Third Meeting	Dates for buying tickets, November 3, 4, 5, 6 and 7.

RATES for the G. A. R. ENCAMPMENT, to be held in Chicago, Aug. 25 to Sept. 1, 1900

RATES FOR THE WEST.

The Western Passenger Association, whose territory is divided into the Eastern committee and Trans-Missouri, announce a rate of one fare for the round trip with minimum rate of \$1 from territory described below, except from which the local one-way rate to Chicago is \$1 or less. Tickets will be on sale from points shown under Eastern committee territory, within a radius of 200 miles of Chicago, on August 20 to 24, inclusive, and from points shown beyond a radius of 200 miles of Chicago, August 21 to 25, inclusive. From points shown under Trans-Missouri territory, east of the eastern state lines of Colorado and Wyoming, on August 24 to 27, inclusive, and from points in Utah, August 21 and 24. All tickets to be good to leave Chicago without execution on any date up to and including September 1, 1900. Tickets sold from points in the territory shown above, under Eastern committee and Trans-Missouri territories, beyond a radius of 200 miles of Chicago, will be extended to leave Chicago on any date up to and including September 2, inclusive, and upon payment of fee of 50 cents at time of deposit.

The territory from which this rate applies in the Eastern committee is: Illinois, on and west of the Illinois Central Railroad, Chicago to Gilman; the Wabash Railroad, Gilman to Decatur; the Illinois Central Railroad, Decatur to Pana; the C. C. & St. L. Railway, Pana to Litchfield; and the Wabash Railroad, Litchfield to St. Louis. Wisconsin, Northern Peninsula of Michigan, North Dakota east of the meridian at which the Missouri River crosses its southern boundary line; South Dakota east of the Missouri River; Iowa and Missouri on the north of the St. L. & S. F. Railroad, following its Vinton Line west of Springfield. The Trans-Missouri territory includes South Dakota west of the Missouri River, Nebraska, Kansas, Oklahoma, Indian Territory, Colorado, Wyoming and Utah.

RATES FROM THE EAST.

The Central Passenger Association, whose territory is bounded on the east by a line drawn through Toronto, Buffalo and Pittsburg, on the south by the Ohio River, including Louisville, and on the north by Lake Michigan, announce a rate of one cent per mile, per capita, short line distance, for the round trip, tickets to be sold from Saturday, August 25, until Wednesday, August 29, inclusive, and to be available for return passage to and including Friday, August 31, after having been stamped and signed by the joint agent of the Chicago terminal railroads, to whom a fee of 25 cents must be paid on each ticket at time it is presented for execution. By depositing these tickets with the joint agent before 11 o'clock noon of Sunday, September 2, and payment of a fee of 25 cents at time of deposit, the return limit may be extended to leave Chicago not later than September 20. In addition to the foregoing arrangements, tickets will be sold from points within a radius of 75 miles of Chicago from August 25 until August 29, inclusive, good going only on date of sale and returning for not more than two days from date of sale at the same rate (one cent per mile), but without requiring the passenger to appear before the joint agent to have their tickets executed. From Eastern and New England States, which are included in the territory of the Trunk Line and New England Passenger Associations, tickets will be sold at one fare for the round trip, except that from points in the vicinity of the Western terminal of the Central Railroad, where through fares, double fares or regular excursion fares to such terminal added to fares therefrom make less than one fare, the same may be used. From the above described territory tickets will be sold on August 25, 26 and 27, and will bear the same conditions as to return limit, including the extension of time, payment of fee for the joint agent, etc., as apply from the territory of the Central Passenger Association.

Additional particulars may be had of any of the following members of the National Association of Merchants and Travelers:

OTTO YOUNG & CO.

149-153 State Street

H. F. HAHN & CO.

Chaplain Building

BENJ. ALLEN & CO.

Silversmiths' Building

C. H. KNIGHTS & CO.

Columbus Memorial Building

LAPP & FLERSHEM

State and Adams Streets

Have YOU Tried The Mowrey & Murray Co.

for Jewelry Work, Watch Case Work or Watch Repairs? If so, you are a steady customer. If not, you will be one if you try them. All kinds of Jewelry made and repaired. A specialty of Case and Watch Repairs. Satisfaction guaranteed. Don't forget the address.

RYAN BUILDING, SAINT PAUL, MINN.

Purchase **Chains** from your jobber that are made from Seamless Filled Wire, exactly as represented, by the well-known and reliable Chain house of

C. A. MARSH & CO.

FINE FINISHED GOODS
SELL THEMSELVES

LORNETTES
NECK CHAINS
BRACELETS
PADLOCKS



Attleboro, Mass.

VEST CHAINS
GRAND VIZIERS
WELLINGTONS
FOBS AND SEALS

20th CENTURY EXTENSION LORNETTES

Jules J. Lintz
Watchmaker
108 Fulton St.
NEW YORK
TELEPHONE 1108 JUNE
FINE TIMEPIECES, COMPLICATED WATCHES
AND CLOCKS—A SPECIALTY
MAKING AND ADJUSTING OF ALL KINDS OF NEW PIECES
DEMAGNETIZING

See special adv. on page 108, June, 1900, issue.
INDISPENSABLE TO THE RETAIL JEWELER
Wells' Perfect Self-Confirming and Ventilating Ring Adjuster is the result of many years' experience. It can be used by a jeweler in five minutes. Ask your jobber for it, or I will send you one on receipt of your order. Assorted sizes, solid 10 K. gold, \$3.75; or 14 K. gold, \$5.00; or 18 K. gold, \$7.50; or 22 K. gold, \$10.00; or 24 K. gold, \$12.50. (No extra charge for shipping.) For samples, a small size gold and medium size metal will be sent for \$1.00, or a medium size metal and large size metal for \$1.50. Address: CHESTER H. WELLS, Jeweler, Meshoppen, Pa.

Still harping on our hobby

Cuckoo Clocks

because it's the one thing we know more about than anybody else in the country. That cuckoo clocks are good sellers is a settled question. Now it's "whose cuckoos shall I buy?"

And that's what we tell you all about here if we had the space—we haven't. Mayn't we send you our catalogue instead? Just send a postal to

AMERICAN
CUCKOO
CLOCK CO.
Manufacturers,
Philadelphia.

CUCKOO, Philadelphia



When writing to advertisers, kindly mention *The Keystone*.

M. F. TURNAGE & SON, Manufacturing Jewelers
and Repairers for the Trade
320 Altman Building
KANSAS CITY, MO.
We make a specialty of all kinds of Order Jewels. Estimates sent on request.

Cleveland and Northern Ohio.

The past few weeks have seen the usual summer exodus of buyers to the resorts, while the much-abused jeweler stays home and prepares for their return in the fall. The business for the month of July has kept up to the volume of last year, and in some instances exceeded it. Collections are good in the larger cities, but the smaller towns have been rather slow.

Capt. R. E. Burdick sailed last week for Europe on the *Peninsular*. The Captain will extend his trip this year so as to take in the Exposition. The usual purchases of diamond goods will be made.

A. T. Hubbard and family will return this week from their summer home on the St. Lawrence.

Geo. W. Seiler, of Seiler & Locher, 143 Euclid Avenue, is away for a few months' vacation among the lakes of lower Canada and Georgian Bay. A congenial company of fishermen accompanies him.

John T. Vansant, manager of the retail department of Bowler & Burdick Co., has just returned from Philadelphia, where he has been on a trip for the health of his family.

E. R. Shaw is enjoying a short vacation at Lodi, Ohio. He will return about the first of the month.

The Cowell & Hubbard Co., during the month of August, will enter upon extensive improvements on the store. The present balcony will be replaced by a much larger one and the office transferred from the art room to the balcony. A new dark room has been added to the optical room.

Edward Quinlan, jewelry buyer for Bowler & Burdick Co., accompanied by his family, is spending the heated term at Linwood Park.

George Walker, accompanied by his bride, is enjoying a trip to Buffalo, Toronto, and other lake resorts.

Henry Hudson, stenographer for Bowler & Burdick Co., is spending a vacation in New York City.

Joe Schuster, Sr., has been to visit his son, who is a student at the Canadian Horological Institute, in Toronto. Mr. Schuster is much pleased with the progress his son is making at the institute.

Mr. Playtner, principal of the Canadian Horological Institute, contemplates a visit to our city in the near future, and it is rumored will deliver an address or lecture to the trade.

Messrs. Need and Rowley, travelers for Bowler & Burdick Co., have returned from their vacations, and will soon start out to hustle business.

Messrs. Will Wagner and Will Kenyon are enjoying well-earned vacations. They will leave again for their first fall trip the middle of the month. Still Bros. Co. are fortunate to have two such genial travelers.

Frank J. Patton, of Cowell & Hubbard Co., is spending a few weeks at Chautauque, N. Y. Mr. Patton is accompanied by his wife.

Henry Jordan, optician for Cowell & Hubbard Co., lost his life companion by a sudden attack of rheumatism of the heart. Mrs. Jordan was thirty-eight years old, and left two children. *THE KEYSTONE* extends its sympathy.

Wm. Arnold and family, Ann Arbor, Mich., were in town last week, continuing pleasure with business.

C. A. Radde was married recently to Miss Wilson, of this city. *THE KEYSTONE* extends congratulations.

Clarence and Herman Goldsmith, of the Deutsch Jewelry Co., have sailed for Europe to visit Paris and other continental cities.

Some two years ago mention was made of a Miss Rose Blumkin, a Cleveland girl, who had gone to the Klondike. Last week Miss Blumkin returned to visit, and reports as being very successful in her new venture. She has a rich claim sixty-four miles from Dawson.

F. H. Kramer, jeweler and optician in the Y. M. C. A. Building, is in New York on business.

Webb C. Ball has been chosen by the Michigan Central Railroad Co. as its official time inspector. Mr. Ball is now inspector for nearly all the "Vanderbilt" lines west of Buffalo.

Mrs. J. T. Riser is spending the month in Chicago, studying art. Mrs. Riser is known to the trade through Riser & Sumner.

Sipe & Sigler are defendants in a suit for damages brought by a former employee. Suit is brought for \$10,000, for the loss of three fingers.

G. R. Range, Mansfield, Ohio, is in the East. Stops in New York and Pittsburgh were made.

Oscar Becker, formerly of Findley, Ohio, has removed to Joplin, Mo., where he has purchased a store. He reports everything as prosperous so far.

Chas. Barrie, Crestline, Ohio, has purchased a store in Galion, Ohio, and will operate both stores.

E. E. Critz, Elyria, Ohio, has been in New York for a few days on business.

The following jewelers from out-of-town were buyers the past week: L. V. Stone, Connaught, Ohio; Frank Fobes, Kinsman, Ohio; Albert J. Miller, Massillon, Ohio; C. J. Duncan, Massillon, Ohio; Geo. A. Clark, Lorain, Ohio; W. J. Higgins, Shelby, Ohio; J. O. McClellan, Chagrin Falls, Ohio.

News from the Northwest.

The Elks' Carnival, meeting of Minnesota State Optical Association, and Teddy Roosevelt, were attractions in the Twin Cities the past month and a large number of outside jewelers took advantage of low railroad rates to visit Twin City jobbers. The early part of the month the general cry was, "No rain; crops all burned up!" But after the 4th of July the faces commenced to brighten up, and the reports agree in saying, "We did not imagine grain could be so improved in condition," and while in localities where wheat was grown exclusively, there will be shortage in crops, from all reports received we can venture the opinion that Minnesota and North and South Dakota will receive more money this year for its crop than it did last year. Corn never looked better; potatoes, a good, staple Minnesota crop, doing finely; hay is coming nicely, and more wild hay will be gathered than ever before; wheat in the Southern tier is an exceptionally good crop, and in the extreme Northwest—the poorest section—it will average five to eight bushels per acre; barley and oats are a good average. So all and all, we believe our prediction is justified by present conditions.

For next month, September, the State Fair, at Hamline, 3d to 8th, will give outsiders another chance with low excursion rates to visit the Twin Cities. The Minnesota Optical Association has wisely chosen September 4th for its next meeting, which will be held at Minneapolis, to which all jeweler-opticians are invited.

Jobbers report summer business all that was to be expected; some even saying extra hours are the rule and vacations have been put off, owing to the fact that help could not be spared. Collections coming in fairly well. Travelers reporting good business and all are smiling for the harvest is now on and fall business will start in with a rush.

P. J. Berndtzen, Lake Mills, Iowa, was a delegate to the Northwest Scandinavian Saenger Fest, at St. Paul, last month.

H. Britzlas, lately in the employ of Grimm Bros., Waukon, Iowa, was in the Twin Cities last month, buying stock for his new store at Faulkton, S. Dak.

Nic Drexel, lately with E. Schmalz, St. Paul, has gone to work for F. E. Callender.

Theo. G. Mahler, Le Sueur, Minn., is in Chicago, taking a course in optics. F. B. Sweet, St. Paul, has charge of the store during his absence.

H. B. Lund, Morris, Minn., was a delegate to the convention of the National League of Republican Clubs, held at St. Paul July 17th.

John A. Martin, Winona, Minn., spent a few days in the Twin Cities last month.

Wm. Crandall, Madelia, has moved to Heron Lake, Minn.

Geo. P. Tutthill, St. Paul, spent a two-weeks' vacation visiting the Lakes in Wisconsin last month.

J. H. Reimer, Glenwood, Minn., came to St. Paul last month to hear, as he says, our next Vice-President speak.

Rose Mark, of Lewis Finkelstein, enjoyed a two-weeks' vacation last month.

Frank Hoberg was arrested for attempting to pass a forged check on A. H. Simon, St. Paul.

John H. Reimer, Glenwood, Minn., attended the Republican State Convention, as a delegate, at St. Paul, June 25th.

Theo. G. Mahler, Le Sueur, Minn., accompanied by Mrs. Mahler, spent a few days in the Twin Cities last month.

Charles Thomsen, of Henry Birkenhauser & Co., was passing smiles and cigars last month, all owing to the arrival of a new boy at home June 25th, the first born. May he prove as good a hustler as his papa.

E. Loeck succeeds Chris. Lee at Benson, Minn. Frank Loeck, lately of Minneapolis, is manager.

Ivan R. Bunker, of S. H. Clausen & Co., Minneapolis, visited his old home at Hudson, Wis., during his two-weeks' vacation last month.

M. Frankenhoef's jewelry store, Browns Valley, Minn., was destroyed in the big fire there June 30th.

Frank Hyde, Sioux Falls, S. Dak., had his store destroyed by fire June 30th. Loss, \$12,000; insurance, \$15,000.

F. J. Kamber, Alton, Iowa, has sold his business to Ed. Korman.

Wm. Plackner, Arlington, Minn., is taking a course in optics with F. A. Upham, St. Paul.

Estella Ripman, with the Fred Scott Estate, Stillwater, Minn., spent a two-weeks' vacation at Red Wing.

Flo B. Sweet, Le Sueur, Minn., came down to hear Teddy Roosevelt speak at St. Paul, July 17th.

Chas. Deard, of Sisco & Deard, St. Paul, enjoyed a short vacation last month.

Fred Willman, Stillwater, Minn., was a delegate to the State Republican Convention at St. Paul, June 25th.

Emil Koerner, of E. A. Brown, St. Paul, has recovered from a severe attack of tonsillitis. His friends say it was too much amusement during the Elks' Carnival.

Martin C. Weyer, Fairbault, Minn., was married last month to Miss Hattie Smith, of Chicago. *THE KEYSTONE* extends congratulations.

Wm. Weiske, for a number of years with F. E. Callender, is now with the Mowrey & Murray Co., St. Paul.

Lewis Bros., Eau Claire, Wis., have opened a branch store at Eveleth, Minn.

Fire at Herman, Minn., gutted the store of S. P. Olson. Loss, \$800; insured.

G. W. H. Anderson, St. Paul, has returned from a nine-months' course at the Bradley Polytechnic Institute, Peoria. He expects to engage in business at Grantsburg, Wis., about August 1st.

F. C. Worrell & Bros., 526 Nicollet Avenue, Minneapolis, had their store damaged by fire July 4th. Loss, \$2,000, covered by insurance.

Chas. Carlson, of Lewis Finkelstein spent all of last month rusticiating in Northern Minnesota. Charlie needed a vacation to rest up.

E. H. Nelson has begun business at Worthington, Minn.

C. H. Carpenter, of the Minneapolis Jewelry Co., was confined a good part of the month by a sprained ankle.

Amasa S. Weller, a former jeweler at St. Paul, was discharged in bankruptcy court last month.

Frank A. Upham, St. Paul, will leave early in August for an extended trip through the Lakes to Buffalo, N. Y., returning via Detroit, where he will attend the convention of the American Association of Opticians.

Carl W. Slocum, of Sisco & Deard, reports good business in Southeast Minnesota and Northeast Iowa, and says crops are in fine condition in that section. Roy Forde, of the same house, has returned from his Northwestern trip. He reports crops short of the average, but an improvement of 100 per cent since a month ago, and looks for good average trade for the rest of the year in that section.

J. H. Bullard and family, St. Paul, are enjoying a month's vacation at Puyallup, Minn.

E. E. Finch, of Lewis Finkelstein, St. Paul, spent a two-weeks' vacation at Clinton Falls, Minn.

Visitors noticed in the Twin Cities the past month were: Edw. J. Moore, Cameron, Wis.; Theodore Schaaf, Hastings, Minn.; L. E. Bryant, Belle Plaine, Minn.; W. W. Winchester, Amery, Wis.; Emil Huisner, Stillwater, Wis.; Nordahl C. Unest, Grantsburg, Wis.; F. H. Moody, Ellsworth, Wis.; S. V. Warren, West Concord, Minn.; P. J. Berndtzen, Lake Mills, Iowa; H. Britzlas, Faulkton, S. Dak.; John H. Reimer, Glenwood, Minn.; Fred Willman, Stillwater, Minn.; Flo B. Sweet, Le Sueur, Minn.; H. B. Lund, Morris, Minn.; John A. Martin, Winona, Minn.; F. J. Kamber, Alton, Iowa; F. Howard, New Rockford, N. Dak.; J. C. Hendricks, Riceville, Minn.; J. L. Moody, Cannon Falls, Minn.; Chas. C. Snare, St. Croix Falls, Wis.; L. Sheridan, St. Charles, Minn.; Fred Gaalas, Stillwater, Minn.; Fred H. Straub, Fergus Falls, Minn.; H. M. Hitchcock, Redwood Falls, Minn.; S. B. Millard, Litchfield, Minn.; L. H. Bruns, Anoka, Minn.; L. J. Korstad, Zumbrota, Minn.; D. W. Brooks, Morris, Minn.

"Without *The Keystone* I would feel as a fish without water."—A. Fuchs, Jeweler, Milwaukee, Wis.

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