

The Carlisle Arrow

A WEEKLY NEWSPAPER PRINTED DURING THE SCHOOL YEAR BY THE STUDENTS OF THE CARLISLE INDIAN SCHOOL

VOLUME XII

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SEEK CHANGE FOR SELLS.

There is nearly always a tendency when a man has made a good record in one official position to seek to change him to another place, supposed to be higher in the scale of honors and emoluments, but which may be unlike, in duties and opportunities, the place in which fame was gained through understanding and good works. This reflection is caused by the anxiety of various persons to have Hon. Cato Sells promoted from Commissioner of Indian Affairs to a cabinet position, if, in the filling of the vacancy in the Department of War, either Secretary Lane or Secretary Houston should be changed.

That Cato Sells might become an excellent Secretary of the Interior or Secretary of Agriculture is admitted. He is able, conscientious, and industrious. As secretary he would have a larger salary and take somewhat higher rank in politics and society. This is not the question. All these years the Indians have waited for a Cato Sells and they need him. It is a far cry from the border ruffian yell of only thirty years ago, "kill the nits; they make lice," when Indian women and children were slaughtered in the wars that were in most cases atrocities, to the pleadings of Cato Sells for the life of the papoose and for humane attention for the Indian mother. Cato Sells stands like Saul among other Commissioners of Indian Affairs,—above their heads from his shoulders up. Better that he should be the savior of a race than the holder of an office. His appointment appears to have been an inspiration. In every fiber he feels himself the brother of the red man—his responsible keeper. His solicitude is not assumed. In his belief the humblest tepee is a home to be improved—the pagan child is being carefully reared and trained as a citizen. As Commissioner of Indian Affairs at this time Cato Sells will be remembered when hundreds of cabinet members have been forgotten. His is a noble work. The cabinet position is only, at usual times, an honorable position. Cato Sells in his place is a builder, a creator. In the cabinet he would be only a conservator. Do not take from the Indians the truest brother and the greatest friend they have ever had.—*Cedar Rapids (Iowa) Gazette.*

SKILLED WORK OF INDIANS WILL BE SHOWN AT FAIR.

The United States Government is participating in the exposition on a scale that in scope covers the activities of the various departments of government. Three buildings, the Sacramento Valley building, the Nevada building, and the Aquarium, are required to house the 18,000 square feet of exhibits.

The Sacramento building contains the displays of the treasury, war, navy and interior departments. Here one can see the educational exhibits of the public health service, showing the modes and manner of preventing the spread of contagious diseases; models of vessels and equipments of the coast guard and naval establishments, heavy artillery and other equipment of the army; and the fruits of the efforts of the Bureau of Indian Affairs to educate the American Indian.

This latter display is expected to be one of the most popular in the building. Here is the concrete evidence that the establishment of the Indian schools throughout the country has not been in vain. These schools have not furnished the customary blankets and baskets so common in Indian exhibits, but have handiwork of steel, wood, and leather of a superior quality of workmanship. The Lawrence, Kan., Indian school exhibits metal, wood, and leather products; the Carlisle and the Chilocco, Okla., schools are displaying some fine shopwork articles; while the Pitt River Indians of the Fort Bidwell school offer unusual bead work for public inspection. Large silver loving cups attest the athletic prowess of the Indians. One cup on exhibition was awarded to the Fort Sill school for the best agricultural products displayed at a state fair.—*San Diego Sun.*

UNIQUE CAMPAIGN TO SAVE BABIES.

Survival of Indian Race Depends upon Its Success— Babies Are Rapidly Dying.

Washington.—A unique baby saving campaign, just launched by Cato Sells, Commissioner of Indian Affairs, is attracting the general attention of statesmen, educators, churchmen, and philanthropists in every part of the country. On its success, Sells says depends the survival of a race.

Commissioner Sells has sent a letter to all superintendents and other employees in the Indian Service urging them to do their utmost to save the lives of Indian babies. Three-fifths of the North American Indian babies, Sells points out, are dying in infancy on account of neglect of ordinary sanitary treatment and lack of food. He directs the employees of the Indian Service to make thorough investigations on the reservations to which they are detailed and spare no efforts in teaching the doctrine of baby saving.

Tribal funds are to be used in forwarding the work if necessary.—*News Item.*

THE "soft snap" never develops the real strength of a boy or man and it fails to give him the discipline and experience that comes from hard work.

COMING EVENTS

- Saturday, March 11.—Band Concert, 7 p. m.
 Saturday, March 18.—Games, etc., in Gymnasium,
 7 p. m.
 Saturday, March 25.—School Sociable.
 Saturday, April 1.—Illustrated Lecture.
 Saturday, April 8.—Band Concert, 7 p. m.
 Saturday, April 15.—Games, etc., Gymnasium, 7 p. m.
 Saturday, April 22.—Joint Entertainment, all Literary
 Societies.
 Saturday, April 29.—School Sociable.
 Saturday, May 6.—General meeting, Auditorium.
 Saturday, May 13.—Final Band Concert.

PROGRAM FOR BAND CONCERT, SATURDAY
EVENING, MARCH 11th, 1916.

1. March—Fighting 10th Tyrrell
2. Overture—Royal Pageant Barnard
3. Trio—Vision Hayes
4. Vocal—Selected.
5. Cornet Solo—Gloriana Barnard
 (Soloist, James Holy-Eagle.)
6. Gavotte—Heart's Delight Warren
7. Selection—The Sunny South Lampe
8. Chimes Solo—Church Parade Arr. Tyrrell
 (Soloist, Miss Roberta Seneca.)
9. Vocal—Selected.
10. Characteristic—They Did and They Didn't. . Dalbey
 Star Spangled Banner.

Y. W. C. A.

Last Thursday evening the Y. W. C. A. members held a general meeting in the Mercer Hall. After the program the following girls were elected to office for the year:

President—Mary Welch.
 Vice-president—Lucy West.
 Secretary—Roberta Seneca.
 Treasurer—Sarah Monteith.

The meeting closed as soon as all business was straight.

Visitors from the Indian Office.

Messrs. Hamilton Dimick and William M. McCoy, of Washington, came Tuesday for a few days' stay at the school. They and Mr. Lipps are members of the Finance Committee recently appointed by Secretary Lane to plan a complete and uniform system of bookkeeping for the Indian Service.

THE VIOLIN RECITAL.

By H. P. Sutton.

Last Saturday evening at 7.30 o'clock, the students assembled in the auditorium to be entertained by Miss Sara Lemer, of Harrisburg, an accomplished violinist. The first number on the program was Wieniawski's "Legende," followed by Massenet's "Meditation-Thais" and "Valse Triste" by Sibelius. The next piece was a composition of Cesar Cui called "Orientale," in which the

oriental characteristics were plainly distinguished. Then came Musin's "Mazurka" which never fails to be a pleasing and soothing piece of music. It was rendered with much expression.

Following this came a number of pieces from Schubert, the "Serenade," "Moment Musical," "Cradle Song," and "Ave Maria."

Vieuxtemps' "Ballade et Polonaise," followed by Drdla's "Souvenir" and "Serenade," which are all beautiful compositions, were played with much feeling. Two pieces from Kreisler, the "Viennese Song" and "Liebesfreud," made up the next division of the program.

The last three features of the entertainment were Cadman's "Wah Wah Taysee," MacDowell's "To a Wild Rose," and the "Hejre Kati" from Hubay. The program was exceedingly interesting and entertaining and the mastery Miss Lemer has of the violin is admirable. She was accompanied by Mr. Stroup, also a fine musician, and the two were deserving of the applause they received.

PROTESTANT MEETING.

By Uneeda Burson.

The meeting opened with a hymn. Frederick Blythe presided. After the signing of a number of hymns, Mr. Clevett lead us in prayer. The scripture was read by Henry Sutton. The speaker for the evening was Mr. Wood, a teacher at the Methodist Church.

The meeting closed with singing of the Lord's prayer.

THE CATHOLIC MEETING.

By Francis A. Ojibway.

The meeting was opened with a prayer, after which a hymn was sung. Father Feeser read a few rules to be observed by the Catholic students during the season of Lent.

The meeting was closed with the benediction.

General Pratt at Sherman Institute.

Brigadier-General Richard H. Pratt, U. S. A., accompanied by his wife, will pay a visit to Sherman tomorrow evening. Both will remain a few days as the guests of Mr. and Mrs. Conser.

General Pratt will find quite a colony of Carlislars to greet him on his arrival here.—*The Sherman Bulletin*.

GENERAL NEWS NOTES.

Nick Lassa is now fifth corporal of Troop D.

Little Robertson Denny had a taffy pull last Monday evening.

Andrew Peters has joined George Warrington's force of waiters.

Sallie Greybeard has been promoted from ranks to second sergeant.

Isaac Bettelyoun left Carlisle Monday for his home in South Dakota.

CALENDAR "DETAILS."

To Visit Literary Societies Tonight, March 10th.*Susans*:—Miss McDowell and Mr. Shambaugh.*Mercers*:—Miss Wilson and Miss Robertson.*Standards*:—Mr. Heagy.*Invincibles*:—Miss Sweeney.**To Visit Literary Societies One Week from Tonight.***Susans*:—Miss Sweeney and Miss Williams.*Mercers*:—Miss Bender and Miss Hagan.*Standards*:—Mr. Peel and Mr. Boltz.*Invincibles*:—Miss Rice and Mr. Shambaugh.**To Inspect Dormitories, Sunday, March 12th.**

(8.30 a. m.)

Small Boys and Annex:—Mr. DeHuff and Miss Bender.*Girls*:—Miss Robertson and Miss Rice.*Large Boys*:—Mr. Meyer and Miss Keck.**To Chaperon Girls to Sunday School, etc., March 12th.**

(9:00 a. m.)

Miss Knight,
Miss Dunagan,Miss Keck,
Mr. McGillis.**To Accompany Girls Walking Sunday Afternoon.**

(4:00 p. m.)

Miss Keck.

**TEACHERS' STUDY HOUR DETAIL FOR WEEK
BEGINNING MARCH 13th.**

Date.	Large Boys' Quarters.	Small Boys' Quarters.	Girls' Quarters
Monday, Mar. 13.	Miss McDowell Mr. Heagy	Miss Robertson	Miss Snoddy Miss Dunagan
Tuesday, Mar. 14.	Mrs. Foster Miss McDowell	Miss Robertson	Miss Snoddy Miss Dunagan
Wed'sday, Mar. 15.	Mrs. Foster Miss McDowell Mr. Heagy	Miss Robertson	Miss Snoddy Miss Dunagan Miss Reichel
Thursday, Mar. 16.	Mrs. Foster Miss McDowell Mr. Heagy	Miss Robertson	Miss Snoddy Miss Dunagan Miss Reichel

OUTING NOTES.

One of our outing students, Eva Patterson, met with a serious accident while returning from school about a week ago. She was struck by a milk train and had several bones in her body broken. She was taken at once to the University Hospital, Philadelphia, where she is receiving every care and attention. Miss Johnson in her report says: "Already the nurses are speaking of her courage and bravery. She did not shed a tear until this morning."

Mrs. Gilbert Aitkin, of Moorestown, in whose home Mary Rorke lives, says she will keep her until June 16th when their school closes. She adds: "I think you could not have sent me a girl who would have pleased me better than Mary has. Thank you."

The outing girls living in Narberth, Pa., are fortunate in working with Professor Melchior, their principal. In a letter to Miss Johnson, Miss Melchior, writing for the principal, says: "I want to thank you for the interest you continually show in our school, as is shown by the copies of *The Red Man* and the mottoes received recently. Both

are splendid. The message, the originality, and the work on the mottoes are worthy of much commendation. The Carlisle Arrow has been coming to us, and the material is of much interest and value. Just this morning one of the high-school girls commented on the excellent reading matter in one of the copies she was reading."

The following are two "home letters" from two of our smallest outing pupils:

My dear father:—My sled is broke and I gave it to the boys down the other place and they gave me a flashlight and other things.

We are having a little cold weather in February. February is the winter month already. How are you feeling now days. I am feeling fine now. I have been sick for two days about two weeks ago.

I am in 4th, 5th and 6th grade now. I only have to go through three more books in the 4th grade then I will be in the 5th and 6th grade.

We have got another dog. He is a little collie. He is nothing but a little fighter and a little baby.

We have got four calves and one bull. This is all I have to say at this time so I will just say goodbye.

From your son,

JOE.

My dear father:—I was glad to see you when you came. I am well and hope you are the same. I was sorry to see you go that Sunday night.

Mr. and Mrs. Rogers and I went to a Dutch supper Tuesday night and we had sour kraut and Mr. Rogers said he never saw a Dutch-Indian. He said that because Dutch people like sour kraut.

I am going to stay all summer here with Mrs. Rogers. Hoping this letter will reach you safe with lots of love and best wishes to you and all at home.

From your loving daughter,

OLIVE.

SCHOOL STATISTICS.

	Boys.	Girls.	Total.
Pupils on campus.....	328	179	507
Outing.....	95	72	167
On leave.....	1	0	1
Deserters.....	1	0	1
Total on rolls March 6.....	425	251	676

GENERAL NEWS NOTES.

Miss McDowell left Tuesday evening for her old home in Conneaut, Ohio, to be with her father, who is reported seriously ill. Mr. Heagy has charge of Miss McDowell's classes during her absence.

Monday morning about eight o'clock, a driving snow-storm set in and by noon the ground was covered with six inches of "the beautiful." Meanwhile, the temperature had dropped down to about fifteen above. Tuesday, the sun, although a little slow about breaking through, got in a good day's work and by night fall the snow was nearly all gone. And Tuesday night—it cold-rained with a little more snow. Where is the groundhog?

The Carlisle Arrow

Issued Fridays from the Carlisle Indian Press
About ten months in the year.

SUBSCRIPTION, 25 CENTS YEARLY
IN ADVANCE.

Address all communications to the paper and
they will receive prompt attention.

Second-class matter—so entered at the Post-
office at Carlisle, September 2, 1904.

WHAT IS AN EDUCATION REALLY WORTH?

*Being a Little Preachment to the Carlisle Students
by the Superintendent.*

A convict in the penitentiary at Fort Madison, Iowa, recently won first prize in an essay contest on the subject, "What Is an Education Really Worth?" In commenting on the announcement of the result of the contest and the subject matter of the essay, the *Des Moines Capital* says:

An element of sadness enters into the thought that one so capable of clear logic and beautiful sentiments has wronged society to such an extent that he must be put into prison. We wonder whether "Convict 10231" is a banker, an author, or a business man. The world will never know him except by number. He says "An education teaches us how to live completely," and he speaks from bitter experience because his own life failed somewhere.

Some people think of education as synonymous with knowledge—knowledge obtained from books. We have been told that knowledge is power, and that crime is the result of misdirected energy. I have frequently heard the statement made that wherever Indian tribes have, in recent years, been robbed of their property some educated Indian made such robbery possible. To be educated in books is one thing, but to be educated so as "to live completely" is quite another thing. The education of the mind alone is not sufficient. Convict 10231 has abundantly testified to that fact.

A well trained mind in a well trained body is a splendid combination as far as it goes, but the trouble is it does not go far enough. Back of these must be moral principle. No matter how well educated the mind, or how physically perfect the body, or how skilled the hand, there can be no complete living without moral character.

Do not confuse reputation with character. They may be, and often are, entirely different. There is such a thing as having a good reputation and a bad character. Our reputation is what others think of us. Our character is what we are.

It is just as impossible to determine the value of an ed-

ucation in dollars and cents as it is to determine the value of our lives in these terms. No one knows what an education is really worth. There are many kinds of education; some are worth more than others. It all depends on the person possessing it and the use made of it. Some persons accomplish more with a common school education than others accomplish with half a dozen university degrees. It all depends on the man. We can get out of life only what we put into it. If we bring much to school with us—much ambition, much industry, much moral force, much "stick"—we will carry much away with us.

But you can't polish a brick. "Heap all time rub, rub, rub an' bime-by brick, he all gone."

THE CARPENTER SHOP.

By Emanuel Ortego.

There are twelve doors to be made for the Annex Quarters.

William Kennedy and Lester Nephew have been kept busy putting up partitions and cutting out openings for doors at the Annex Quarters.

A number of slat sashes which are to take the place of glass sashes have been made for the green house.

Isaac Willis made a music case last week; it is now ready to be painted.

Mr. Gardner, with the assistance of some of the boys, is making some drawing boards for the Mechanical Drawing Department. Thirty-two are to be made.

SMALL BOYS' QUARTERS.

By Luke Obern.

The play-room has been converted into a bedroom and barber shop, because of the necessity for more room on account of the increased number of students who recently arrived from North Carolina.

There are about one hundred students in the Quarters and some under the Outing.

The troops have not the full number of officers. Troops G has a captain, first and second lieutenant, and first sergeant. Troop F has a captain, second lieutenant, and first sergeant.

Both troops drill every Friday and Monday. Last year Troop F won first prize in the competitive drills. They hope to win it again this year.

GENERAL NEWS NOTES.

"Be on Time," is the slogan heard at Large Boys' Quarters just now.

Miss Yoos is teaching her girls the names and uses of all the sewing machine attachments.

Sunday evening, February 27th, Harriet Snow, Edna Rockwell, Mary Lieb, Elizabeth Red Owl, Jessie Daisy, John McDowell, Donald McDowell, Wilfred Eshelman, Harry D. Webster, Ephraim Webster, and Eli Swallow were confirmed in St. John's Episcopal Church by Bishop Darlington. Leona Bonser was confined in the school hospital and the Bishop made a special visit to the school to confirm her.



Indian School Restaurant as Conducted by the Carlisle Alumni Association.

ALUMNI NOTES.

Stella Bear, Class 1910, writes from Elbowoods, N.D.: "I am working here at the boarding school as seamstress and find my work very pleasant and a nice change from cooking."

In a letter from the State School of Science, Wahpeton, N. D., Mary Pleets, a former pupil, writes: "I am attending school here and taking the commercial course. I like my studies, which are shorthand, typewriting, English, spelling, and penmanship. I am making use of the piano lessons I received from Carlisle. I play for the chapel exercises on Sunday evenings and also for the general assembly on Wednesday night."

From Mary Pleets we also get the following information: Mae Wheelock, class 1912, is the assistant matron at the Wahpeton Indian School.

Ovilla Azure, Class 1915, is the carpenter at the same school.

Mary Gokee was a student there until she took sick.

Sophie Pleets, who left Carlisle in 1911, was married to Charles Whitsell in 1913. She died June, 1915, leaving a little girl.

Mabel Brunette, who left the school a year ago, writes that she has spent her time at home with her mother but that now she has made application to enter the city and county hospital, St. Paul, Minn., to study nursing.

Wedding Bells.

Cards announcing the marriage on the 23rd of February of Miss Inez Brown to Mr. George Henry Stenson were

received by Carlisle friends. The wedding took place at the bride's home in Browns Valley, Minn. Miss Brown was graduated from Carlisle in 1910, and is a young woman of more than ordinary intelligence and good looks. Mr. Stevenson is to be congratulated upon his happy choice. Carlisle extends to the young couple best wishes for a long and happy life.

GENERAL NEWS NOTES.

Through a letter we learn that Hobart Jamison, a former student of Carlisle, is now working in Cleveland, Ohio.

Miss Hagan has returned to the school room after an absence of three weeks, due to a fractured elbow.

Ivy Metoxen, Carlisle graduate of 1913, is now located in Madison, Wis., where she is working and doing well in a private home.

The even vocational girls in Miss Searight's class were interested to learn the names of the different attachments of the sewing machines.

Mrs. Canfield's talks on sewing have been very inspiring to the girls of the odd division and they feel greatly benefited for having received her instructions.

The girls in Mrs. Canfield's class in the sewing room who expect to go out as teachers were given subjects to talk about each week. Mary Welch gave a talk on "Seams" last week.

The officers at Girls' Quarters were very much pleased to have Mr. Lipps present at their regular Tuesday evening meeting. He gave them a helpful talk in which he brought out strongly the necessity of feeling responsibility when one is appointed to some special position.

DOMESTIC ART DEPARTMENT.

Lecture and Demonstration for the Week Ending
March 11, 1916.*First, Second, and Third Year Vocational.*

Monday and Tuesday, March 6th and 7th—

Study of materials from samples.

Wednesday, March 8th—

Hand made garments and their suitableness.

Thursday, March 9th—

Same as Tuesday.

Friday, March 10th—

Review.

Third-year Vocational.—Lecture and Demonstration.

Monday, March 6th—

Lesson on drafting and folding the sleeve pattern.

Tuesday, March 7th—

Dressmaking:

- (a) waist.
- (b) sleeve.
- (c) pockets.
- (d) belts.

Wednesday, March 8th—

The largest sleeve used in the history of time. Pattern made of the sleeve.

Thursday, March 9th—

Children's sleeves.

Friday, March 10th—

Lecture on the origin of the needle.

Prevocational and First, and Second-year Vocational.

Monday, March 6th—

Cutting and making a sheet:

Material (width $\frac{1}{2}$, $\frac{3}{4}$, $1\frac{1}{2}$):

- (a) length.
- (b) ordinary sheet.
- (c) hem.
- (d) cost of sheeting.

Tuesday, March 7th—

Practice in using attachments:

- (a) gague.
- (b) hemming and sewing on lace.
- (c) tucker.

Wednesday, March 8th—

Cutting and making pillow case:

- (a) length and width of muslin
- (b) seam and hem.
- (c) cutting from $2\frac{1}{2}$ yards of muslin.

Cost of four pillow cases.

Dimensions of ordinary pillow.

Thursday, March 9th—

Patching:

- (a) hem patch.
- (b) over-hand patch.
- (c) flannel patch.

Friday, March 10th—

Review.

THE STANDARD LITERARY SOCIETY.

By Edwin Miller.

The house was called to order by the president, Homer Lipps. After the usual roll call and the preliminary

business transactions, the house proceeded with the election of officers, which resulted as follows:

President—Joseph Helms.

Vice-President—Edwin Miller.

Secretary—Arnold Holliday.

Corresponding secretary—George Warrington.

Treasurer—Lawrence Silverheels.

Critic—George Merrill.

Assistant critic—George Tibbetts.

Sergeant-at-arms—Leon Miller.

Assistant sergeant-at-arms—Joseph Shooter.

The election consumed considerable time, as several of the officerships were so hotly contested by various candidates that it required the casting of votes twice by the house before an election could be made.

Afterwards the society was favored with very interesting and helpful talks by Mr. Tyrrell, bandmaster, and Mr. Abrams, the school horticulturist, on how much one is benefited by taking an active part in society work, and how it helps one after leaving school. Mr. Peel, the advisory member of the society, also made some timely remarks about the welfare of the society and how each member should conduct himself while here and after leaving school.

THE INVINCIBLES.

The meeting was called to order at the usual hour last Friday evening by President Peter Jackson, who read a few verses from the Bible, after which the society song was sung. Kiutus Jim became a member of the society. After the usual miscellaneous business was transacted, the following program was rendered:

Declamation—Cecil Collins.

Essay—John Papineau.

Extemporaneous speech—Archie St. Godard.

Select reading—J. M. Martineau.

Debate.

Resolved, That President Wilson should be re-elected.*Affirmative*—Charles Whitehorn and Clarence Welch.*Negative*—Frank Kabogm and Nicholas Lassa.

The house was opened for general debate and the following members responded: Donald McDowell, Earl Wilber, and James Leader.

The Judges who were Obed Axtell, Benedict Guyon, and James Holstein, decided in favor of the negative.

Mrs. Gehringer was the official visitor for the evening and gave a short talk.

GENERAL NEW NOTES.

The small boys have lost their dog "Jim." He was sent to Slatington, Pa.—for higher education. No more shoes carried off now.

Monday morning, a strange figure closely wrapped in a heavy cloak was seen ascending the steps of the western wing of the academic building. Upon reaching the second floor, the figure turned to the right, and entered Room 11. Later it was discovered that the stranger was none other than Miss Reichel, who had come to resume her duties after two weeks of the mumps.

SHOP TALKS.

By ROY H. BRADLEY, *Director*
Mechanic Arts Department.

CARPENTRY.—Lecture II.

Tools and Their Uses.

The degree and diversity of manipulative skill and of trade knowledge required by the carpenter can best be indicated by a brief description of the principal tools in the use of which he must become adept. These are as follows:

Saws.—A carpenter's handsaw consists of a thin piece of steel called the blade, upon which teeth are cut along the edge. The handle end of the blade is called the head and the other end the point. The blade is considerably wider at the head than at the point. Handsaws are classified as rip and crosscut. The rip saw is for cutting with the grain of the wood, and the crosscut is for cutting across the grain. They are also classified according to the number of teeth per inch. The saw in order to cut well and move freely must have what is called set. Setting a saw consists of bending its teeth alternately from side to side, thus making the cut wider than the blade is thick. The amount of set varies according to the use of the saw. In sawing green or undried lumber, the saw requires a greater set than in sawing well seasoned lumber, and a crosscut saw requires more set than a rip saw. The pitch of the saw tooth is the angle of the tooth formed by the slanting edge of the tooth with a straight line drawn through the point of the tooth at right angles to the edge of the saw blade. The amount of pitch depends upon the kind of work for which the saw is to be used, rip saws, for example, requiring more pitch than do crosscut saws.

The crosscut saw is used for cutting across the grain, and the teeth are filed so that the cutting edges are on the side. The teeth are sharpened to a point, one on one side, the next on the other, leaving a V-shaped space between and giving two parallel lines of sharp points. The rip saw is used for cutting with the grain, and the teeth are filed straight across at right angles to the line of the blade, making them chisel shaped. The backsaw is a saw having a thin blade strengthened by a heavy steel backpiece and is used upon work requiring accurate cutting. The teeth are such that they may be used as a rip or a crosscut saw. The compass saw has a thin narrow blade fitted in a handle and is used for inside curved cutting. The turning saw, used to cut along curved lines, has a thin narrow blade, fastened at each end in a frame in such a manner that it may be loosened and the blade put through an auger hole and refastened. The carpenter must be skillful not only in the use of these various saws, but as well in filing and setting them properly and in testing new saws for proper temper and quality.

Planes.—The plane, used for straightening and smoothing the surfaces, consists of a body in the bottom of which there is a slit called a throat, through which the cutting piece called the plane or blade projects. The cutting

part of the plane consists of the plane iron, the end of which is sharpened on a bevel to a cutting edge, and the plane cap iron, a flat curved piece of steel which is fastened against the plane iron about one-sixteenth of an inch from the cutting edge by a short heavy screw called the plane-iron screw. This cap serves to stiffen the plane iron and also bends and breaks the shaving, thereby preventing a splitting action in front of the cutting edge. Just back of the throat of the plane is the frog, fastened to the bottom by screws. The object of this frog is to hold the plane and cap iron in place and to carry the thumb screws by which the plane iron is adjusted. The plane iron and cap iron are held firmly in place by the frog by means of a clamp worked by a cam. The vertical adjustment of the blade for thickness of shaving is made by means of a thumbscrew on the underside of the frog, and the horizontal adjustment of the plane iron is by a lever just under the plane iron.

Planes are made in different sizes and lengths to suit the different kinds of work. The jack-plane is about thirteen inches long and is used for removing large quantities of rough wood, leaving the piece fairly smooth. The smooth plane is used for smoothing material which has been roughly smoothed and straightened. The jointer plane is used for smoothing and straightening long and uneven material, and is often two or more feet in length. It is used more often on glue joints. The block plane is about six inches long and is used for planing the end grain of the wood, where there is no vise handy for holding the piece. A very considerable degree of skill is required for sharpening properly and adjusting these planes for different classes of work.

The Brace and Bit.—The brace is a tool used to hold and turn various kinds of bits used in boring, drilling, countersinking, or driving screws. They are made in two kinds, the ordinary brace, and the ratchet brace; the latter is fitted with a ratchet in the grip so that the bit can be turned in one direction only. This brace is necessary where an entire revolution of the brace cannot be made, and also for boring in hard wood, or turning large screws. The most common forms of bits used in the brace are the following: the auger bit, which has a spur to draw the bit into the wood, two nibs for cutting the fiber, and two lips to remove the waste which is brought by the twist to the surface. The drill bit, which has only the twist sharpened at the end, is made of tempered steel and is used in boring either hard wood or iron. The countersink bit has a large V-shaped cutting end for enlarging screw holes so that the screw head will draw down even with or below the surface. The screwdriver bit is like the blade end of the screw driver and is used for driving large screws.

Squares.—The framing square is a large square made of a piece of metal; the long arm, which is usually 24 inches long, is called the blade, and the short arm, usually 16 inches long, is called the tongue. The square is graduated to inches and fractions of an inch; also on the blade there is a board-measure scale, and on the tongue a rafter-measure scale. This is one of the most important tools the carpenter has to use. The framing square, however, is used more often in getting board measures, testing corners,

(Continued on page eight.)

SHOP TALKS.

(Continued from page seven.)

for setting the bevel to various angles, and in framing of roofs. The try-square consists of a blade—a thin piece of steel—with a handle of wood or steel, called a beam, attached so that the edge of the beam forms a right angle with the edge of the blade. The blade is graduated into inches and fractions of an inch. The try-square is used in testing the end or edge of a piece of material to see that it is square with the adjoining surface and also to test the thickness of the piece.

Chisels and Gouges.—Chisels are commonly made in two kinds; the framing chisel, used for heavy work, which has the handle fitted into a socket on the end of the chisel; and the firmer chisel used for lighter work, which has a tang upon which the handle is fitted. Chisels are of varying widths and are used for cutting joints, and are among the most useful of the carpenter's tools. Gouges are similar tools except that the cutting edges are curved, with an inside or outside bevel.

Gauges.—The marking gauge consists of a beam holding a marking point or spur of metal, the beam being graduated to inches and fractions of an inch. There is a head which slides over the beam, and in the head is a thumbscrew for holding it in place at any desired distance from the spur. The marking gauge is used for laying out lines along the grain of the wood. In the pencil gauge a pencil is inserted instead of the spur. In the slitting gauge the spur is made sharp and strong enough to cut through thin material, and in some cases the gauge is constructed with a handle like that on a plane.

Other tools in the use of which the carpenter must acquire manipulative skill are the spoke shave, for smoothing curved surfaces; the mallet, for driving chisels in heavy cutting; the bevel, with movable blades used in getting angles for cutting rafter ends and other material; screw-drivers of various types, such as ratchet and spiral; hammers, flat and bell faced miter boxes, levels, wrenches, awls, nail sets, rules, files, rasps, pliers, hatchets, bench axes, and vises.

A very important part of the carpenter's trade knowledge relates to the care of his tools. The carpenter's bench, which is, perhaps, the most neglected of anything he uses—with the result that it is frequently rendered unfit for use—must be kept free from nails, glue, and marred places in order not to scratch the work placed upon it. Saws by constant use in all sorts of weather become dull, rusted, and loose at the handles, and must be properly repaired or they become useless for accurate work. If wooden planes are used, the metal part must be kept bright and the wooden soles true and free from grooves caused by nail or sand particles. Iron planes, which rust easily, must be kept well oiled, especially in damp weather. Chisels must be kept bright and clean and the handles in good condition. The handle of the chisel should always be struck with the mallet, as the hammer will split it, and when in this condition it cannot be safely used, nor can accurate work be done with it. All edge tools must be kept sharp and free from rust, as a matter of economy of time and labor and of quality of workmanship.

In addition to his vocational equipment in the way of

manipulative skill, and of trade and technical knowledge, the carpenter, if he is to advance in his trade, must be a man of practical judgment, of good artistic sense and imagination, and with a capacity for solving the practical problems that arise in every line of his work.

ROSEBUD NEWS ITEMS.

Miss Iris I. Wier, of Albert Lee, Minn., has been appointed to fill the position of financial clerk at Rosebud. Miss Wier entered on duty March 2nd.

Supervisor Davis and Charles M. Smith, clerk, have just finished making a \$46,000 annuity payment to the Rosebud Sioux. The payment was made at this time to tide the Indians of this tribe through the remainder of the winter.

Mrs. May Warden and Morris Walker Jannis were united in marriage at the home of Supervisor and Mrs. Charles L. Davis, Wednesday, March 1st, at Rosebud, S. Dak. The simple but impressive ceremony was performed by Supervisor Davis in the presence of immediate friends. The couple were unattended. The bride is a graduate of the Santee Indian School, and a capable and efficient worker among the Rosebud people. The groom is an ex-student of the Carlisle Indian School, and now acting as judge of the Indian police court of this reservation. Both the bride and the groom are excellent representatives of the schools from which they graduated. The happy couple will make their home near Mission, S. Dak., where the groom is active in farm industries. The best wishes of their many friends are extended them.

SUSAN LONGSTRETH LITERARY SOCIETY.

By Pauline Chisholm.

The house was called to order at the usual hour by the president. Each member present responded to roll call with a quotation. Next in order was the confirmation of new members. Rachel Shenderlion was confirmed and Abbie Somers' name was handed in for re-admission. After business the following program was rendered:

Song—Society.

Reading—Rose Allen.

Recitation—Ella Cuellar.

Piano Solo—Joesphine Printup.

Dialogue—Lucy Greene, Minnie Grey, and Rose Heaney.

Oration—Hattie McAfee.

Pen picture—Mary Lieb.

Debate.

Resolved, That Roosevelt should be re-elected as our next president.

Affirmative—Ida Clarke, Mae Hicks, and Relia Oshkosh.

Negative—Martha Wheelock, Mary Peters, and Alice Powless.

Judges for the evening were Maude Cooke, Sallie Greybeard, and Sarah Monteith. The judges gave their decision in favor of the affirmative.

After the critic gave her report the house was opened for visitors' talks. The visitors were Mr. McGillis, Miss Boyd, Miss Montion, Mrs. Foster, and Louise Beartail.