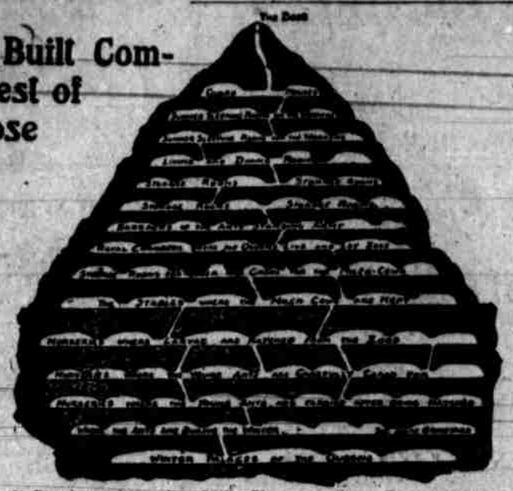
WONDERFUL CITIES BUILT BY ANTS

Insect Architects Whose Well Built Comfortable Homes Excite the Interest of Scientists--The Ant, Seen at Close Range, Offers Many Valuable Suggestions to Man

The Sentry on the Look-Out.



A Section of an Ant-Hill, Showing How It Is Divided. The Black Part Shown Is Above Ground Level and the Shaded Part Below.

THE most wonderful, the smallest, and yet the most populated cities in the world are those built by millions and millions of ants. Forests rarely trodden upon by the foot of man are the spots in which these tiny, intelligent insects love to rear their cities and palaces. To such undisturbed places they flock in millions. An ant city consists of dozens of mounds of earth reaching to a height of four or five feet, and having a circumference of from 20 to 30 feet. These are the palaces, the skyscraper buildings, in which the ants dwell. Inside are as many as a dozen floors connected by staircases and upon these floors the various grades of ant civilization live and work and die.

Each is a model city. Every inhabitant has its daily work to do; some are the royalty, others are the soldiers, police, dairymaids, nursemaids and working civilians. There is not a shirker among them. The instant any ant becomes too tired or too lazy to work he is either driven out of the house or his head is nipped off by the immense jaws of a policeman.

Three Grades of Citizens.

In each house are three grades of people—the kings and queens; the aristocrats, at whose bidding are armies of well-trained soldiers and police, equipped with most powerful jaws; and the workers, the real builders of the house, the food suppliers, and menials.

Besides soldiers there are sentries, who stand from morning till night and from then to daybreak ever keeping a watchful guard. At dusk the door at the top of the mound is locked and after this no one, friend or foe, is allowed to enter the citadel. Should an enemy seek to storm the house under cover of the darkness, the sentries give the alarm, the sleeping army is roused and mobilized, and instantly they rush out and fall upon the invaders.

Entering by the front door, a passage of about a quarter of an inch in diameter leads downward into the house. Nine inches or so from the main entrance galleries branch off in every direction, and lead to rooms of different sizes, according to the purpose for which they were constructed. Some rooms are two inches long, three quarters of an inch high, and an inch or more in width.

The Dairy and the Milkmaids.

Below the first floor are a dozen others, all connected by slanting passages like staircases, and on every floor, again, are many rooms—bedrooms, dining rooms, playrooms, storerooms, and on one floor even a graveyard. Deep down in the earth are the stables of the cattle—the aphids or milch cows, and the honey cows, which are certain tiny insects.

The dairymen look after the cows with the greatest care. In the spring the aphids are placed on tender blades of grass, and the honey cows are driven up the trees in search of young and nourishing leaves. Every day finds the cows in new pastures. At milk time other ants—the milkmaids—appear, who stroke the tiny aphids with their feet until they give up a drop of milk. With this the milkmaids hurry down to the baby ants' playroom, where the nursemaid ants take it from them and give it in turn to their numerous charges.

So that the stock of cows shall not diminish, the ants occasionally make a raid upon stray aphids, and convey their unwilling prisoners to their stables. Here they are encouraged to breed, and their young are watched and tended with the greatest care. There is a significant reason for this attention, because as the queen ants lay thousands of eggs every day, which are taken away to be hatched by other ants—a process lasting from 15 to 20 days—there are always millions of baby ants in the nurseries continually crying for milk.

To watch over these millions of infants is a very trying duty for the nursemaids, who are constantly scurrying round putting the babies on their feet, giving them milk, protecting them from danger, and so on, just as anxious human mothers do.

When they reach the age of three or four weeks the infant ants spin soft, warm blankets around themselves preparatory to going fast asleep for several days. The nursemaids have a period of comparative rest and quietness then, but as soon as the ants awake there is a time of hustle and bustle. The youngsters have to be helped out of their blankets and given baths, and eventually they look just like grown-up ants, except that they have wings.

Responsibility Begins.

Led by the queens and their consorts, the young ants leave their palace in a great swarm, and fly high in the air. That marks the point where responsibility enters their life. For after this aerial flight the queens tear off their wings and settle down to housekeeping and raising a family. If any queens are wanted in the palaces already built, they take up residence there, otherwise they employ a crowd of worker ants to build a palace for them.

While the home of the queens is being constructed, a body guard of soldiers and attendants surround the fair ladies to protect them from marauders, and as the population of the palace grows, so the number of soldiers, police and other attendants is increased. The dairymen, nursemaids and foragers are soon everlastingly busy, for they have not only to supply their friends with food in the summer, but have also to store a quantity sufficient to feed the palace's millions throughout the winter, when the outside world is cold and barren.

These ants are a marvelous people. They do not know what failure means. If a pebble or a stick stands in their way, an ant will run for help, and return with an army that never rests until the obstacle is removed. Their immensely strong jaws do all the work, for a single ant is capable of lifting a weight 1,000 times its own.

CHURCH SERVICES

BAPTIST.

Immanuel—Second and Meade streets; Rev. G. W. Griffin. At 10:30 a. m. and 7:30 p. m., preaching; Bible school, 12 m.; Young People's service, 6:30 p. m.

Mount Olive—Seventh and Everett streets. Preaching, 8 p. m.

University Park—Rev. John Bentzien. Sunday school, 10 a. m.; 11 a. m., "Echoes From Our National Convention"; 7:30 p. m., "Lost—A Man!"

St. John's—Rev. E. A. Leonard. Sunday school, 10 a. m.; preaching, 11 a. m.; 7:30 p. m., preaching.

Sellwood—Eleventh and Umatilla streets; Rev. George A. Learn. Sunday school, 10 a. m.; preaching, 11 a. m. and 7:30 p. m.

First—The White Temple—Twelfth and Taylor streets; Rev. J. Whitcomb Brougher, D. D. One accord prayer meeting, 10 a. m.; 10:30 a. m., "Deuteronomy: Remember, Rehearse, Renew and Obey"; Bible school, 12:10 p. m.; B. Y. P. U., 6 p. m.; 7:30 p. m., "Three Straight Shots."

Arleta—Laurelwood hall. Sunday school, 10 a. m.; preaching, 11 a. m., by Rev. J. W. Brock.

Third—Vancouver avenue and Knott; Rev. E. M. Bliss. At 10 a. m., Sunday school; 11 a. m. and 7:30 p. m., preaching; B. Y. P. U., 6:45 p. m.

First German—Fourth and Mill streets; Rev. J. Kratt. Preaching, 10:45 a. m. and 7:30 p. m.; Bible school, 10:45 a. m.; B. Y. P. U., 7 p. m.

Second German—Rodney avenue and Morris street; Rev. F. Bucerman. Preaching, 1 p. m. and 7:30 p. m.; Sunday school, 9:45 a. m.; Young People's meeting, 6:45 p. m.

Swedish—Hoyt and Fifteenth streets; Rev. Eric Scherstrom. Preaching, 10:45 a. m. and 7:30 p. m.; Sunday school, 12 m.

Russelville—Schoolhouse. Sunday school, 2:30 p. m.

Norwegian-Danish—Service at Lents, 3 p. m. and at Artisans' hall, Savier street, near Twenty-second, 8 p. m.

Highland—Alberta and Sixth streets. Preaching, 2:30 p. m. by Rev. B. M. Bliss; Sunday school, 3:30 p. m.

Central—East Ankeny and Twentieth streets; Rev. W. T. Jordan. At 10:30 a. m., preaching, "Forgotten Vows"; 8 p. m. sermon, special praise service; Sunday school, 12 m.

Calvary—East Eighth and Grant streets; Rev. A. Lawrence Black. At 10 a. m., Bible school; 11 a. m., preaching; 5:30 p. m., Bible class for young men; 6:30 p. m., Young People's service; 7:30 p. m., preaching.

Grace—Montavilla; Rev. Gilman Parker. At 11 a. m., "Walking With God"; evening, "Wet or Dry in Montavilla—Which?"

Second—Seventh and East Ankeny streets; Rev. Stanton C. Lapham. At 10:30 a. m., preaching, "The Temple of Worship"; Bible school at noon; Young People's Union, 6:30 p. m.; sermon, 7:30 p. m. "The Cornerstone of the Nation."

PRESBYTERIAN.

Fulton—Rev. A. H. Burkholder. Services at 8 p. m.

Marshall-Street—Marshall and North Seventeenth streets; Rev. C. W. Hays. Sunday school, 10 a. m.; preaching, 11 a. m. "Building Up a Church"; 7:30 p. m. "Three Points in Witnessing 'a Good Confession'"; Y. P. S. C. E., 6:45 p. m."

Mizpah—Mary and Powell streets; Rev. Jerome R. McGinnis, D. D. At 10:30 a. m., preaching, "Burden Bearing"; 7:30 p. m., anniversary service, subject, "The Presbyterian Church—Past and Present"; 12 m., Sunday school.

Third—East Thirteenth and Pine streets; Rev. Andrew J. Montgomery. Preaching at 10:30 a. m.; sermon at 7:45 p. m. by Rev. Robert McLean of Porto Rico.

Calvary—Eleventh and Clay streets; Rev. Ben-Ezra Stiles Ely Jr., D. D. At 10:30 a. m. and 7:45 p. m., preaching.

Fourth—First and Gibbs streets; Rev. John Rayen Welch. Preaching at 10:30 a. m.; 7:30 p. m., preaching.

Church of the Strangers—Wasco street and Grand avenue; Rev. S. Earl Du Bois. Preaching, 10:45 a. m.; Sunday school at noon; Christian Endeavor, 6:45 p. m.; no evening service.

Mount Tabor—Belmont street and Prettyman avenue; Rev. E. M. Sharp. Services at 11 a. m. and 7:45 p. m.

East Side—Millard avenue; Rev. Mr. Ferguson. Sunday school, 3 p. m.; preaching, 4 p. m.

First Cumberland—East Twelfth and East Taylor streets; Rev. E. Nelson Allen. At 10:30 a. m., preaching; 12 m., Sunday school; 3:30 p. m., Junior Endeavor; 7 p. m., Senior Endeavor; 8 p. m., preaching.

First—Twelfth and Alder streets; Rev. Edgar P. Hill. Services, 10:30 a. m., Children's day service; 7:45 p. m., sermon, "False Christs."

Piedmont—Cleveland avenue and Jarrett street; Rev. L. Myron Boozer. Preaching at 11 a. m. and 7:45 p. m.; Sunday school, 12:15 p. m.

Arbor Lodge—Bryant and Curtis streets. Sunday school at 3 p. m.

METHODIST.

Central—Russell and Kerby streets; Rev. J. T. Abbott. Class meeting, 9:45 a. m.; 10:30 a. m., preaching; Sunday, 12 m.; Epworth League, 6:45 p. m.; 7:45 p. m., sermon.

Sunnyside—Yamhill street between Thirty-fifth and Thirty-sixth streets; Rev. T. B. Ford. At 10 a. m., Sunday school; 11 a. m., sermon; 12 m., class meeting; 3:30 p. m., children's class and Junior League; 6:15 p. m., Epworth League; 8 p. m., service by Epworth League.

Taylor-Street—Dr. Francis Burgette Short. At 9:30 a. m., classes; 10:30 a. m., "Righteous Judgment"; 12:15 p. m., Sunday school; 6:30 p. m., Epworth League"; 7:30 p. m., "Oregon—Beautiful and Productive," illustrated service.

Epworth—Twenty-third and Irving streets; Rev. Henry T. Atkinson. Bible school, 10 a. m.; morning service, 11 o'clock, "God's Remembrance"; Junior League, 3 p. m.; 6:45 p. m., Epworth League; 7:45 p. m., sermon.

Patton—Michigan avenue and Carpenter streets; Rev. Melville T. Wire. Preaching at 11 a. m. and 7:45 p. m.; Sunday school, 10 a. m.; Epworth League, 6:45 p. m.

Free—East Ninth and Mill streets; Rev. J. Glen. Preaching at 11 a. m., followed by testimony meeting; Sabbath school, 10 a. m.

Centenary—East Pine and Ninth streets; Rev. William H. Heppe, D. D. Preaching at 10:30 a. m. and 7:45 p. m.; morning class, 9:30 o'clock; Sunday school, 12:15 p. m.; Juniors and Intermediates, 3 p. m.; Epworth League, 6:15 p. m.

Grace—Twelfth and Taylor streets; Rev. Clarence True Wilson. Preaching at 10:30 a. m. on "The Men for the Twentieth Century"; 7:30 p. m. on "The Crisis"; class meeting, 9:30 a. m.; Sunday school, 12:30 p. m.; Epworth League service, 6:30 p. m.

Trinity—East Tenth and Grant streets; Rev. Harold Oberg. Service at 11 a. m., with sermon by Professor W. H. Mahaffe; 8 p. m., sermon; Epworth League, 7 p. m.; Sunday school, 10 a. m.

EPISCOPAL.

Trinity—Nineteenth and Everett streets; Rev. A. A. Morrison, rector. Holy communion, 8 a. m.; Sunday school, 9:30 a. m.; morning prayer, 11 o'clock; song service, 8 o'clock p. m.

St. Stephen's—Thirteenth and Clay streets; Rev. H. M. Ramsay. Holy communion, 7:30 a. m.; Sunday school, 9:45 a. m.; morning service, 11 o'clock; evening service, 7:30 o'clock.

St. Paul's—Woodmere; C. L. Parker, lay reader. Service and sermon at 11 a. m. and 8 p. m.; Sunday school, 2 p. m.

St. Matthew's—First and Caruthers streets; Rev. W. A. M. Breck. Holy communion, 11 a. m.; Sunday school, 9:45 a. m.; service, 7:45 p. m.

All Saints'—492 North Twenty-second street; Rev. Robert Hope, Ph. D., D. D. Sunday service, 11 a. m. and 8 p. m.; Sunday school, 10 a. m.

St. David's—East Twelfth and Belmont streets; Rev. George B. Van Waters, D. D. Holy communion, 8 a. m.; morning prayer and sermon; 11 o'clock; evening prayer and sermon; 7:30 o'clock; Sunday school, 9:45 a. m.

St. Mark's—Ninth and Quimby streets; Rev. J. E. H. Simpson. At 8 a. m., holy communion; 10 a. m., Sunday school; 11 o'clock, holy communion and confirmation; 8 o'clock, evening prayer.

Good Shepherd—Sellwood street and Vancouver avenue, Albina; Rev. John Dawson. Sunday school, 10 a. m.; holy communion and sermon, 11 a. m.; evening prayer and sermon, 7:30 o'clock.

St. John's Memorial—Sellwood; Rev. W. R. Powell. Sunday school, 11 a. m.; service and sermon, 8 p. m.

LUTHERAN.

St. James' English—West Park and Jefferson streets; Rev. J. A. Lenz. Services at 11 a. m.; sermon; 8 p. m., special service of Luther League; Sunday school, 10 a. m.; Luther League, 7 p. m.

Betania Danish—Union avenue and Morris street; Rev. Gudmund Grill. Sunday service, 11 a. m. and 8 p. m.; Sunday school, 12:15 p. m.

Norwegian Synod—East Tenth and Grant streets; Rev. O. Hagoes. Sunday school, 9:30 a. m.; services at 11 a. m. and 8 p. m.

St. Paul's German Lutheran—East Twelfth and Clinton streets; Rev. A. Krause, pastor. Morning service, 10:30 o'clock; evening sermon, 8 o'clock; Sunday school, 9:30 a. m.

Norwegian—49 North Fourteenth street; Rev. J. M. Nervig. Services, 11 a. m. and 7:30 p. m.

Swedish Immanuel—Nineteenth and Irving streets; Rev. C. J. Renhard. Services at 10:30 a. m. and 8 p. m.; Sunday school, 12:15 p. m.

CONGREGATIONAL.

Highland—Prescott and East Sixth street, north; Rev. Arden M. Rockwood. At 11 a. m., preaching, "A New Way to Get Rid of Evil"; 7:45 p. m. sermon, "Keeping Away Our Hope"; Sunday school, 10 a. m.; Junior Endeavor, 3 p. m.; Senior Endeavor, 6:45 p. m.

University Park—Artisans' temple, Portsmouth; Rev. D. B. Gray. At 11 a. m., preaching, "Angel Ministration"; Sunday school, 10 a. m.

Laurelwood—Arleta hall; Rev. D. B. Gray. At 8 a. m., preaching, "What Thinking Has to Do With Character"; Sunday school, 10 a. m.; Y. P. S. C. E., 6:30 p. m.

First—Madison and Park streets; Rev. E. L. House, D. D. At 10:30 a. m., preaching by Rev. A. R. Colton of Boston; 7:30 p. m., Mendelssohn musical service with address, "The Genius of Mendelssohn"; Sunday school, 12 m.; Y. P. S. C. E., 6:30 p. m.

Sunnyside—East Taylor and East Thirty-fourth streets; Rev. J. J. Smith. At 11 a. m., sermon, "The Inheritance of the Saints"; 8 p. m., sermon, "One Solution of Life's Problem"; Sunday school, 10 a. m.; Junior Christian Endeavor, 3 p. m.; Senior Christian Endeavor, 6:15 p. m.

Mississippi-Avenue—Mississippi avenue and Fremont street; Rev. William L. Upshaw, pastor. Sunday school, 10 a. m.; sermon, 11 a. m., "What to Seek"; 7:45 p. m., sermon, "The Royal Road to Happiness."

Hassalo-Street—East Seventh and Hassalo streets; Rev. R. R. Ham. At 10:30 a. m., preaching, "The Lost Christ"; 12 o'clock, Sunday school; 6:30 p. m., Endeavor; 7:45 p. m., sermon, "Why Unite With the Church?"

CHRISTIAN.

First—Park and Columbia streets; Rev. E. S. Muckley. At 10:30 a. m., "The Function of the Bible"; 7:45 p. m., "How to Be Happy"; Bible school, 12:15 p. m.; Christian Endeavor, 6:30 p. m.

Central—East Twentieth and Salmon streets; Rev. J. F. Ghormley, D. D. At 10:45 a. m., sermon, "The Supreme Test of Greatness"; 7:45 p. m., preaching, "The Bullet and the Home."

Rodney-Avenue—Rodney avenue and Knott street; Rev. F. Elmo Robinson. At 9:45 a. m., Bible school; 11 a. m., "The Desire of All Ages"; 6:30 p. m., Y. P. S. C. E.; 7:30 p. m., "No Compromise With the Devil."

EVANGELICAL ASSOCIATION.

Memorial—Rev. R. D. Streyffler. At 10 a. m., Sunday school; 11 a. m., preaching; 6:30 p. m., young people's service; 7:30 p. m., evangelistic service.

First English—East Sixth and Market streets; Rev. A. S. A. Stewart. Preaching, 11 a. m., "What Is Man That Thou Art Mindful of Him?"; 8 p. m., "Cities of Refuge"; Sunday school, 10 a. m.; Young People's Alliance, 6:45 p. m.

Grace—Lents; Rev. H. O. Henderson. Preaching, 11 a. m. and 8 p. m.; Young People's Alliance, 7 p. m.; Sunday school, 10 a. m.

First German—Tenth and Clay streets; Sunday school, 9:30 a. m.; sermon, 10:45 a. m.; sermon, 8 p. m.

LATTER-DAY SAINTS.

Church of Jesus Christ of Latter-Day Saints—Hall 400 Alisky building, Third and Morrison streets. Services at 11:30 a. m. and 7 p. m.; Sunday school, 10 a. m.

Reorganized Church of Jesus Christ of Latter-Day Saints—Woodward hall, Montavilla; W. S. Pender, pastor. Sunday school, 10 a. m.; preaching, 11 a. m. and 7:30 p. m. by Elder W. S. Pender.

UNITED EVANGELICAL.

First—East Tenth and Sherman streets; Rev. A. A. Winter. At 10 a. m., Sunday School; 11 a. m., sermon; preaching, 7:30 p. m.

St. John's—John and Ivanhoe streets, St. Johns; Rev. E. E. McVicker. Sunday school, 10 a. m.; 11 a. m., preaching; J. K. L. C. E., 2:30 p. m.; S. K. L. C. E., 6:30 p. m.; 8 p. m., preaching.

Second—Fargo and Kerby streets; Rev. J. Bowersox. Preaching, 11 a. m., by Rev. H. L. Pratt, followed by communion service; preaching at 8 p. m.; Sunday school, 10 a. m.; K. L. C. E., 7:15 p. m.

CHRISTIAN SCIENCE.

First Church of Christ, Scientist—Scottish Rite cathedral, Morrison and Lownsdale streets. At 11 a. m. and 8 p. m., subject, "God, the Preserver of Man"; Sunday school at close of morning service.

Second Church of Christ, Scientist—Elks' temple, Stark and Seventh streets. At 11 a. m. and 8 p. m., "God, the Preserver of Man"; Sunday school, 11 a. m.

SPIRITUALIST.

First Society—Third street near Washington. Conference at 11 a. m.; 2:30 p. m., lecture by David A. Leisk, "The Poets and Spirit Return."

Bible Society—Drew hall, 162 Second street. At 11 a. m., Children's Progressive lyceum and conference; 8 p. m., Mrs. Laura F. Share will conduct the services, assisted by Mrs. Ladd-Finnican.

MISSIONS.

Beacon Light Mission—11 Fourth street, north. Preaching every night and Sunday at 3 p. m.

Olive Branch Mission—289 First street near Columbia. Preaching every night at 7:30, Sundays 3 p. m.; Sunday school, 1:30 p. m.

St. John's Holiness Mission—325 Second street near Main; Rev. John F. Glasco. Services every night and Sunday at 3 and 7:30 p. m.

ZION.

C. C. A. C. Z.—Alisky hall, second floor, Third and Morrison; Rev. Charles A. Hoy. At 2 p. m., Bible study and children's meeting; 3 p. m., "The Full Gospel of Salvation and Divine Healing as Taught by an Unchanging Christ of All Time."

C. AND M. A.

Christian and Missionary Alliance—Sixth and Main streets; Rev. C. D. Sawtelle. Preaching, 10:30 a. m.; Sunday school, 12:15 p. m.; young people's meeting, 6:30 p. m.; evangelistic service, 7:30 p. m.

UNITARIAN.

Church of Our Father—Seventh and Yamhill; Rev. W. G. Eliot Jr.; Rev. T. L. Eliot, D. D., minister emeritus. Service at 11 a. m., "Science and Prayer"; Sunday school at 12 o'clock.

UNITED BRETHREN IN CHRIST.

First—East Fifteenth and Morrison streets; Rev. H. C. Shaffer. Bible school, 10 a. m.; preaching, 11 a. m. by Elder J. S. Rhodes, communion; Y. P. S. C. E., 7 p. m.; sermon, 8 p. m. by the elder.

NEW CHURCH SOCIETY.

Swedenborgian—Knights of Pythias hall, Eleventh and Alder streets; Rev. Hiram Vrooman of Boston will speak at 11 a. m. and 8 p. m.

ADVENT.

Advent—Second street between Hall and Lincoln; Rev. Charles Heffenden. Sunday school, 10:30 a. m.; preaching, 11:30 a. m.; services, 7 p. m.

UNIVERSALIST.

First—East Couch and East Eighth streets; Rev. W. F. Small. At 11 a. m., "Our Thought and God's Thoughts"; 10 a. m., Sunday school.

METHODIST SOUTH.

First—Rev. Emery H. Mowre. Sunday school, 10 a. m.; preaching, 11 a. m.; Epworth league, 7 p. m.; preaching, 8 p. m.

SPIRIT OF TRUTH.

Spirit of Truth Society—Auditorium hall, 208½ Third street; Sophia B. Selp, pastor. At 8:15 p. m. John Slater of San Francisco on "Spirituality."

FRIENDS.

Friends' Church—East Main and Thirty-fifth streets; Rev. Lewis I. Hadley. Sunday school, 10 a. m.; preaching, 11 a. m. and 8 p. m.

MILLENNIAL DAWN.

Millennial Dawn—G. A. R. hall, Second and Morrison streets. Services at 2:30 p. m.

CHURCH OF GOD.

Church of God—428 Hawthorne avenue; Elder G. T. Neal in charge. Services, 2:30 and 7:30 p. m.; Sunday school, 1 p. m.

NEW THOUGHT.

Church of Freedom—Drew hall, 162 Second street near Morrison. At 11 a. m., "Overcoming and Inheritance."

BEWARE OF THE SCOOP!

Don't take scoop coffee when you want Arbuckles' ARIOSA Coffee, which is sold only in sealed packages and never loose out of a "scoop."

A grocer may recommend a loose coffee at so much a pound. He is all right. He means well. If he handled the coffee himself from the tree to you, you might well trust him implicitly.

But he does not!

He may know something about coffee. He may think he does, but let that pass. He buys it loose! From whom? You don't know—if you did it would not mean anything. He trusts the man he buys it from—maybe a salesman, maybe a wholesaler, maybe a little local roaster. It does not matter. What do they know about coffee? More than the grocer? Perhaps.

Where do they get their coffee?
Where does it come from?
Whose hands touched it last?
Where had they been?

They can't tell Java from Brazilian by the looks after it is roasted, and it takes a man, expert by years of practical experience, to select sound, sweet green coffee of high cup merit; and another man with the knowledge and experience to proportion and blend for uniform results in the cup. First they must have the supply to preserve uniform quality.

Arbuckles buy more coffee than any four other concerns in the world combined, and their coffee is the most uniform. Then the roasting.

"The Brazilian Ambassador tells me that coffee-roasting is an art," was the court testimony of a world famous chemist. Where are artists more likely to find employment—manipulating a little roaster or in the Arbuckle mills, where the yearly roast amounts to the hundred million pounds?

Don't take scoop coffee, but buy a package of Arbuckles' ARIOSA. Take it home and keep the bean intact until ready to use. We hermetically seal each bean after roasting with a coating of fresh eggs and granulated sugar to close the pores and preserve the flavor. A little warming makes it easy to grind and develops the flavor. Coffee deteriorates if exposed to the air—it also collects dust and absorbs impurities. That is why you should "BEWARE OF THE SCOOP."

If your grocer will not sell you the genuine Arbuckles' ARIOSA Coffee it will be greatly to your advantage to buy from us direct. Send us $1.80, postal or express money order, and we will send 10 pounds of Arbuckles' ARIOSA in a strong wooden box, transportation paid to your freight station. Price fluctuates and cannot be guaranteed for any period. You cannot buy as good coffee for the money under any other name or loose by the pound. More—the coffee will come in the original packages bearing the signature of Arbuckle Bros., which entitles you to free presents—10 pounds—10 signatures. New book with colored pictures of 97 beautiful useful presents will be sent free if you write. You can write first and see the book before you order the coffee.

The present department is an old institution with us to add a little sentiment to the business.

PRICE IS NO EVIDENCE OF QUALITY!

ARIOSA is just as likely to suit your taste as coffee that costs 25 or 35 cents a pound. It aids digestion and increases the power and ambition to work.

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WRIGHT is RIGHT

WHEN HE SAYS: "DON'T LOSE YOUR NATURAL TEETH"

Decayed Teeth are unnatural, uncomfortable, unhealthy

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Let Us Do Your Work

We design, carefully plan, build up, tear down and rebuild Tooth Structure — WE DO IT WELL — ARTISTICALLY — ECONOMICALLY -- PAINLESSLY.

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FOLLOWING PRICES WILL SAVE YOU 25c ON EVERY DOLLAR. QUALITY GUARANTEED

SCHILLING'S BEST BAKING POWDER is still, per lb	35c
DRY GRANULATED SUGAR, PER SACK	$4.70
21 LBS DRY GRANULATED SUGAR	$1.00
3 pkgs Magnolia cleaned currants	25c
3 pkgs new 3-crown seeded raisins	25c
3 lbs new 3-crown loose Muscatels	25c
1-lb can Royal baking powder	40c
Crosse & Blackwell's olive oil, qt bottles	65c
1-lb pkg Arm & Hammer soda	5c
1-gal can fancy table syrup	40c
½-gal can fancy table syrup	20c
Shredded Wheat biscuit, per pkg	10c
6 lbs Louisiana rice	25c
Fancy Early June Peas, per doz	90c
12 bars Royal Savon soap	25c
7 cans best ¼ sardines in oil	25c
Cove oysters 1-lb cans, solid, per doz	90c
H-O oats, 2-lb pkgs, per pkg	10c
Best picnic hams, per lb	11c
Shredded coconut, per lb	15c
Hard-wheat flour, per sack	$1.00
Scotch oats, per pkg	10c
Postum cereal, per pkg	20c
Fell's Naptha soap, per bar	5c
Best soft-wheat flour, per sack	$1.00
Java & Mocha coffee (regular 35c)	25c
¼ box soda crackers (about 10 lbs)	50c
English Breakfast tea, per lb	15c
Fancy Gunpowder tea (regular 35c)	15c
Broken Java Coffee, per lb	10c
Uneeda Biscuit, per pkg	5c

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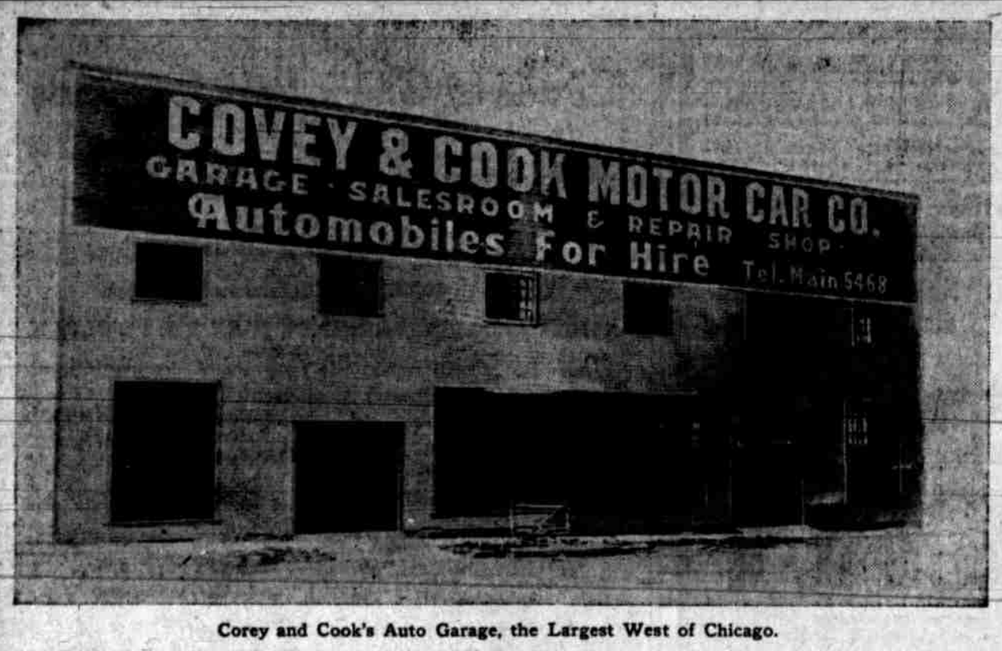

Corey and Cook's Auto Garage, the Largest West of Chicago.

The Corey & Cook Motor Car company are now housed in their new garage, Fifteenth and Washington streets. This institution is the largest of its kind west of Chicago and can accommodate 125 machines. The garage is a model in modern convenience and equipment and has been arranged specially for the handling of the immense business worked up by this popular firm.

GENERAL ASHE AND STAMP ACT

By Rev. Thomas B. Gregory.

LAWS authorizing the use of stamps for raising revenue were introduced into England from Holland in the reign of William and Mary.

In 1732 it was propesd to Walpole that he impose the stamp law upon the colonies, but the great minister replied, "I will leave the taxation of America to some of my successors who shall have more courage than I have," and when in 1757 the like proposition was made to Pitt he replied: "I will never burn my fingers with an American stamp tax."

But eight years later, Grenville, Pitt's brother-in-law, was courageous enough to attempt what the others were afraid of, and by the parliament of 1765 the stamp act was passed.

It was the beginning of the revolution. The Americans declared that "taxation without representation is tyranny," and that they would not submit to it.

From New Hampshire to Georgia the voice of the people was unanimous in echoing the sentiment of the resolution that "The imposition of duties and taxes by the parliament of Great Britain upon a people not represented in the house of commons is absolutely irreconcilable with their rights."

No sooner was the stamp act passed than the popular indignation began to manifest itself. The pulpits denounced it. The press, then beginning to be a power, thundered against it. The "Sons of liberty in Massachusetts, New York, Pennsylvania and other colonies denounced the scheme and threatened the direst consequences to those who should attempt to carry the obnoxious law into effect.

In October, 1765, a general congress of the colonies met in New York and sent out broadcast documents denouncing the law and asserting the rights of the people as against King George and his officers.

In the meantime something else happened that had great influence for good at the time, but that has somehow been strangely overlooked by the historians.

I refer to the stamp party in Wilmington, North Carolina, which came off in November, 1765—an event that has well been called "the first overt act against the authority of Great Britain, the first triumph over its officers, the first to compel royal officials to sign an act of disobedience to the soverign authority of England's king."

Houston, the stamp master of the British givernment, reached Wilmington about the middle of November. General Ashe, backed by the people, went to Houston's lodging place and took him to the courthouse, where he was forced, in the name of the people of North Carolina, to sign a resignation of his office.

When, a few days later, the stamps arrived in the sloop-of-war Diligence there was no stamp master to receive them, and they remained boxed up on board—as useless as though they had been at the bottom of the ocean.

In the meantime two merchant vessels coming into port were seized by a British warship because their papers were not stamped. Calling out the New Hanover militia, General Ashe made a visit to Tryon, the royal governor, and informed him that he had come for a redress of the people's grievances and that the merchant ships must be given up.

The governor was stubborn; Captain Lobb, of H. M. S. Diligence, was also stubborn, and General Ashe, with his militiamen—who were sailors as well as soldiers—boarded the warship and demanded that the captain should give up the merchant vessels.

Within three hours the patriots had the vessels in their possession.

But the Tar Heels were not through yet. Their blood was up and while they were about it they were going to make a clean sweep.

Colonel Pennington, his majesty's collector of customs, and Mr. Day, his majesty's collector of the port, were in the governor's mansion, protected by the governor's guard, but Ashe and his militiamen wanted to see them, and they did see them.

Surrounding the mansion with his patriot force, General Ashe asked Messrs. Pennington and Day to step out onto the lawn, and they were there made to solemnly swear that they would never issue or use any stamp paper in the province of North Carolina.

Antiquity of Fountain Pen.

From the New York Times.

"A new idea in a fountain pen," said the antiquary. "A self-filler. Without bothering with a glass dropper, you just dip the pen itself in an inkstand, press this small spring, and, in a jiffy, the pen contains enough ink to last a week.

"We are accustomed, by the way," the old man continued, "to think the fountain pen a comparatively new invention. I discovered today that it is 120 years old at least—120 years old."

He took down an old book from the mahogany shelf. Samuel Taylor's "Universal System of Shorthand Writing," published in 1786, and from the work he read the following proof of the fountain pen's great age:

"I have nothing more to add," wrote Samuel Taylor, "for the use or inscription of the practitioner, except a few words concerning the kind of pen proper to be used for writing shorthand. For expeditious writing, some use what are called fountain pens, into which your ink is put, which gradually flows when writing, from thence into a smaller pen cut short to fit the smaller end of this instrument; but it is a hard matter to meet with a good one of this kind."

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