

The Janesville Daily Gazette An Institution of Service Since 1845



FOREWORD

Through the pages of this little book you are invited to see what five centuries ago was a realm of mystery. Printing made it possible for the thoughts of men, the story of their lives, the moving panorama of events, to be put down for all generations to read and know.

Some of the most interesting features about the publishing of a newspaper and the preparation of radio programs, the romance that never gets into print or into a radio program, you cannot grasp in one trip through the Gazette plant and WCLO studios. The "Inside Story", therefore, we are glad to set forth in this book, so that you may read while seated in your most comfortable chair.

Intelligence, ideas, leadership, progress and character—these are some of the factors which readers and listeners appreciate most in their Janesville Gazette and Radio Station WCLO.

A Warm Friend to 15,000 Families

So effortless does it all seem, so unfailing in its daily appearance, that the vast majority of readers do not realize what a great number of details have been handled in a twenty-four hour day before the Gazette reaches the reading table of their homes.

Every day, every edition, is a race against time. Each day presents different problems, but the purpose is always the same: "To print today's news, today, uncolored and unbiased; to produce the best newspaper for Southern Wisconsin readers." By being friendly and helpful the Gazette is welcomed as a warm friend by more than 15,000 families. There are no social distinctions in its social columns. It reaches out to shake the hand of every reader, printing stories of his hobbies and pictures of his family. Its big staff of 120 special correspondents in four counties cover every event, illustrating the news with pictures.

The Gazette tells its subscribers how to crochet a dress, what is going on in London or Singapore, how to bake a new kind of cake, what new taxes or schemes are being formed at Washington, what the Governor is doing, what the sermon will be about next Sunday, when Mrs. Neighbor will get home from the hospital with the new baby, what kind of a dress the school teacher wore when she was married, where to locate a lost dog, sell a house or buy a car, and a thousand and one other news items about sports, school functions, activities on farms which so influence the lives of people in its circulation territory.

Since 1845 the Gazette has reported four American Wars—the Mexican, the Civil, the Spanish-American, and the World War. It has brought to its readers the results of 24 presidential elections, kept them informed on national flood tragedies and aided in securing money for relief of the victims.

In addition to its tireless efforts of supplying its readers with local, domestic and foreign news, the Janesville Gazette assumes a responsibility to its community that far exceeds the ordinary operations of the general newspaper.

These "extra curricular" activities are altruistic in purpose and the power of both press and radio will continue to be used as a power for good.

Upwards of 6,000 children are members of the Gazette Good Times Club, a club that has been in' operation for fourteen years, carrying sunshine to rural school pupils, removing the drabness from the little schoolhouse.

The Gazette Good Samaritan, with her column in the newspaper and her voice over WCLO handles personally the cases of hundreds of needy families, cutting all red tape to meet emergencies.

Service

It has become known that anyone who wants a service of any kind, can get it through the Janesville Gazette. The business office is open daily except Sundays. WCLO studios are open the year 'round except between 10 p. m. and 7 a. m.



Gazette Swim Classes



The scene above is typical of happy summer days when danger of drownings are minimized by such efforts as the Gazette Red Cross life saving program. The insets show the Gazette portable tank and a demonstration of resuscitation.

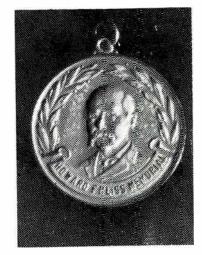
The interest of over 60,000 boys, girls and adults has been captured by the Gazette's program to reduce drowning and teach life saving. When the Ol' Swimming Hole makes its first appeal, the Gazette sends out a Red Cross instructor, using a

large, portable canvas tank, in localities where lakes are not available, he holds classes in each community, teaches youngsters how to swim and trains older children how to save drowning people. The result is that drownings have been decreased.

In conjunction with this Southern Wisconsin life saving program is the Howard F. Bliss Memorial awards of a gold medal and \$50.00 honorarium and certificate of honor to those who have rescued drowning persons. This annual recognition of heroes has created intense interest.

The editor of the Gazette has written and has seen produced five pageants for 4-H Clubs and other rural organizations, the receipts for which made it possible to continue the 4-H Club Annual County Fair.

Many other worthwhile projects are promoted and financed by the Janesville Gazette in the interest of the boys and girls and the men and women of this community.



Howard F. Bliss Memorial Gold Medal for Life Saving. Established 1928.

Gazette Business Office Hums With Activity



In this well lighted, airy office are 35 busy sales people, bookkeepers, clerks and managers.

\$

Seeing a Modern Newspaper Made

During your trip through the Gazette plant, a little of the wonder of publishing a daily newspaper was presented you. You saw steel, paper and ink. If you visited the plant in the day time, you witnessed the smoothly-working co-ordination of brains and skill—everyone working toward press time. You have heard the clickity clack of the teletype machines, the pounding of typewriters—the clatter of the linotypes—the hum of the big press.

As you entered the first floor door, you came into the main office where the Gazette greets the public in its personal contacts. The general business pertaining to the newspaper is transacted on this floor. Behind 31 desks are the bookkeepers, advertising salesmen and salesgirls, subscription staff and department managers.

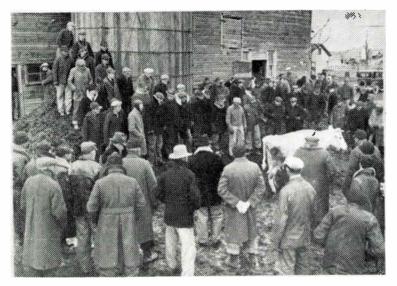
The telephone exchange with 10 Gazette outside lines at the front of the office is one of the busiest spots in the entire plant. There are no dull moments for the newspaper telephone operator. Inter-office communications, incoming and outgoing calls average 1,000 a day. There are twenty-seven telephones in the building, yet at times, these are not enough. On some occasions calls to the Gazette and WCLO have swamped all facilities of the Janesville telephone exchange.

Advertising

Fifteen people in the Classified, Local and National advertising departments assist retailers, wholesalers, farmers and national advertisers with their advertising in the Gazette.

The newspaper depends largely upon advertising for its income and the charge it makes for advertising depends upon how many people read it as well as how thoroughly it serves the community. The number of subscribers, in turn, depends upon the character of the newspaper and the news that it brings them. If it is progressive, meets their problems, and satisfies a need in their homes, it will be welcomed as the Gazette is welcomed every day by 15,000 families.

To be useful to the reader, advertising must carry real information. It must be news. Newspaper advertising creates desires, it tells the reader what and where are "Today's best buys," it influences his decisions and guides his buying. Through the Janesville Gazette all types of advertisers gain the attention of thousands of readers in their homes, where they plan their purchases.



400 farmers attended this Gazette advertised auction.

The Janesville Gazette is the pioneer auction newspaper in Wisconsin. During the past 12 years Gazette auction advertising has been good insurance to hundreds of farmers who wish to protect their investments, which, in many instances, represent life's earnings. The Gazette helps farmers in the preparation of their sales for successful auctions.

Advertising Department

Everyone uses advertising. Often we are not even conscious of the impression advertising leaves on us, but it influences our planning and our buying. Being human, our conceptions and desires are based on what we read and see. Newspaper advertising tells us what and where to buy.

Gazette advertising solicitors are highly trained men and women who must be well acquainted with the problems of retailing. They must know how to write appealing copy, what illustrations and type faces will lend themselves best to a particular kind of an advertisement. They must have a sufficient knowledge of all types of merchandise so that the elements of style, price and quality may be interestingly presented. The preparation of an advertisement being largely a matter of mental processes, with the aid of artist's drawings, allows little for visitors to see.

After an advertisement is fully prepared for the printer, it is dispatched to the "ad alley" in the Composing room on the second floor.



Artist sketching full page newspaper advertisement.

All good advertising is news. It must be interesting to attract our attention, for we are interested also in the other news and advertisements on the page. We like pictures in advertisements because they tell us quickly what would take many words, but we are most impressed by ideas that strike our fancy. Then, before we realize it, we are using the idea and buying the goods.

News Room

Here editors receive news and pictures from the Gazette's special news staff, Associated Press and news features. Other editors are rewriting telephone reports from 120 special correspondents in 83 southern Wisconsin communities, and 12 staff writers cov-



Gazette reporters keep in touch with all sources of news.

ering Janesville. Each has a telephone and typewriter. (There are 44 typewriters in the building).

Let's say a Brodhead store burns. The Gazette correspondent in that city calls the news department and gives a few facts to the city editor. Meantime, a Gazette photographer and reporter have been sent to take pictures of the disaster. They work hand in hand to cover every detail. They rush back to Janesville, photos are routed through at highest speed, engravings are made, the reports are pieced together and sent to the typesetters. The editor and make-up man reserve space on the first page for the big story and pictures, and today's news reaches Brodhead and all Gazette readers today.

Editorial Rooms—Heart of the Newspaper



EDITORIAL STAFF—Reading from left to right: John Dooley, reporter; Howard Koehn, reporter; Harris Drew, asst. managing editor; Stella Avery, filing and utility; James Creutz, reporter; George Kalvelage, news and city editor; Bernice Warner, Good Times club and secretary to editor; Stephen Bolles, editor; Roland Kuehn, farm editor; Carol Field, regional news editor; Peg O'Brien, society and theater; George Raubacher, sports editor.

Gazette Has Fast Teletypewriters



Automatic machines type all Associated Press news,

News is by far the most important commodity a newspaper has to offer. To secure it from all parts of the world the Gazette and WCLO have two Associated Press and one Transradio Press teletype machines. These are automatic typewriters.

The operator in New York types out a story on a teletypewriter. Each word is transformed into a code and stamped into a paper tape which is fed through another machine which transforms the tape code into telegraph code. This is sent by telegraph wire direct from New York to the Gazette, and by other wires to other newspapers and radio offices. Here the telegraph code is changed back to actual words on the automatic typewriter which prints 60 words per minute. The machine is turned on and off by the sender and it runs 18 hours every day.

After all news stories are written, corrected and given headlines, they are turned over to the managing editor who schedules them for their proper place in the paper. A system of four compressed air conveyors provides immediate contact between the radio, editorial, advertising and typesetting departments.

The Associated Press is the largest news-gathering organization in the world, with trained correspondents in every important city. It is an association of newspapers by which each member supplies the "AP" with important news and pictures from its own territory, gathered by its local news staff. Through its hundreds of members the "AP" is in close touch at all times with news where and when it breaks.

The morgue, a fireproof room just off the news room, is the reference room of the Gazette. Here stories and pictures of noted people who have been in the public eye in the past several years are kept in individual envelopes.

Thousands of clippings, pictures and engravings are available here at a moment's notice — movie stars, prize fighters. politicians, material and pictures of organizations, ships, countries and buildings—all information a newspaper may need at any moment.

In the morgue is filed also a copy of every issue of the Gazette since August 14, 1845. These papers, some yellowed with age, are bound in large volume and stacked

The Morgue

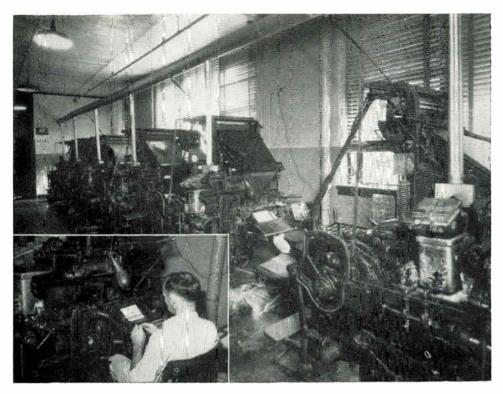


Facts being taken from Gazette's historic files for "Looking Backward" column.

in large volumes and stacked in cases around the walls of the rooms, ready for use.

If England's flagship sank today, the Gazette would have details of the disaster from the Associated Press, and pictures of the ship and its captain available in the morgue.

Linotype Alley



Six of a battery of nine linotypes located in the composing room on the second floor. Each linotype is operated by a skilled operator. Inset shows operator at kyboard.

Ad Alley

Copy for advertisements coming from the advertising department is handled in the composing room somewhat like news copy. Type styles and faces are marked on the copy, with instructions to the printer. While he is setting the larger hand-set type for headings, a machine operator sets other lines, and the stereotyper casts flat metal illustrations. They work together in these manyhanded operations, their movements so timed that no minutes are wasted in setting of the ad.



 $\operatorname{Compositor}$ in ''ad alley'', where type and illustrations are made into advertisements.

Make-Up

As soon as advertisements and news are set into type they are assembled on the "make-up" tables. Each ad is slipped into its place designated by the advertising department, while the news matter is fitted into one of the pages chosen by the "make-up" man or specified by the editor.

When the page frame is filled with news and advertising type on the "make-up" table, it is locked tight, then shifted to a truck and to the matrix rolling machine.



MAKING UP A PAGE Skilled fingers swiftly marshal shining type ... the form is locked up ... and another page is ready for the matrix roller.

THE COMPLETED MATRIX The stereotype paper is here being placed upon a form of type and pictures just before it is rolled into a completed matrix.



Mat Making

The modern newspaper no longer prints from type itself. To make high speed printing possible there are several steps necessary between the type on the "make-up" table and the fast-revolving rotary press. Since type cannot be locked up in a curved frame, that will fit onto the press, a copy of the type is made in the form of a curved metal plate. This is fitted over a cylinder on the press, one plate for each page.

' The first step in the making of the cylindrical printing plates is the rolling of the matrix. A matrix is a specially prepared piece of thick paper, full page size, which is moist and pliable enough to be forced in and around the indentations of type, etc. One of these matrix sheets is laid upon the type page and covered with a cork blanket and a sheet of pressboard. The form is then passed under a solid cylinder which exerts a pressure of one ton to the square inch. When the process is completed a perfect reproduction of the page will be found impressed into the matrix.

Stereotype

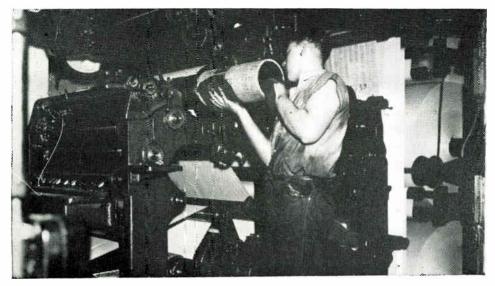
After the mat has been dried and shaped on the matrix scorcher it is then ready to go to the stereotyping department. Here it is locked up in the curved casting box where molten metal is poured around the face of the mat. The metal must be kept at a temperature of 600 degrees Fahrenheit in order to perfectly reproduce the char-

acters on the matrix. In about two minutes the metal has cooled sufficiently to unlock the casting box and the result is shown in the picture; the page of type and pictures transferred from the mat surface to a curved metal plate.



A matrix and the curved cylinder plate moulded from it.

Now the large cylinder plate is ready for the saws where the ends are cut, and the inside is shaved to the proper thickness. Another operation routs out any high spots in between type characters and pictures. The plate is then placed on the big press as shown in the illustrations.

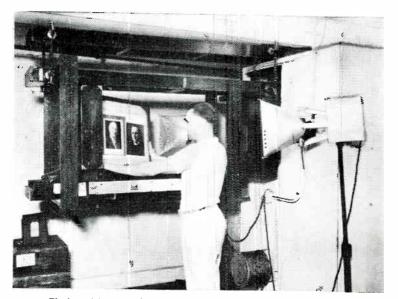


Placing the cylinder plate on big press.

Making Engravings

The engraving department is on the basement floor. Here all local photographs and drawings used in the Gazette are reproduced in metal so that they can be printed. This process is complicated, and a high degree of skill and care is necessary, as the work is done under pressure of time.

In making an engraving, the first step is to reproduce the picture by photograph. The picture to be photographed is placed in a frame opposite the lens of the camera. The negative is taken in much the usual way except that a screen is placed in the



Placing pictures in frame before camera ready for photographing.

camera in front of the sensitized glass plate upon which the negative is taken.

Without this screen, half-tone negative reproductions would be impossible. The screen is a glass plate crossed by parallel lines, at right angles, forming a cross hatching like a fly screen.

When the negative is developed, it is treated with several chemical solutions which bring out the image and sharpen the contrasts. After being further strengthened with transparent rubber cement and collodion, the negative is dried and cut to size. This film is then carefully transferred to another piece of glass and is ready for photographing on metal.

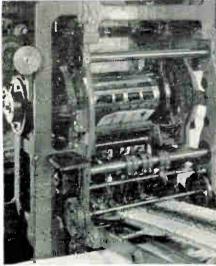
A plate of pure zinc is sensitized to light. The specially prepared negative is placed in a printing frame with the sensitized zinc plate pressed closely to it and subjected to a strong light. This reproduces the photograph on the zinc plate.

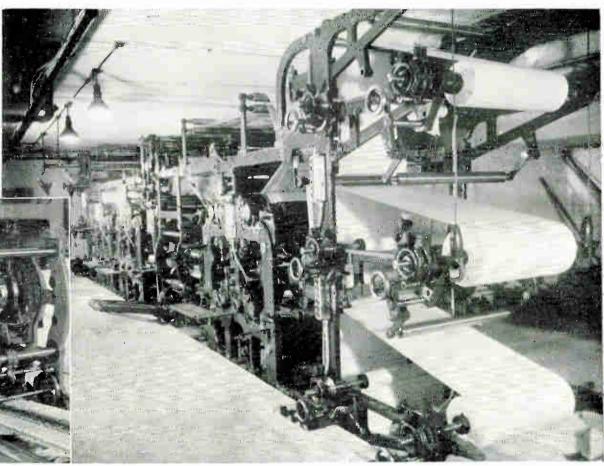
After the image is printed on the metal plate, it is then placed under a water tap and developed under cold water. In this operation the parts of the image that were exposed to the light stay on the metal and the parts that were not exposed to the light are washed off. When the plate is developed, it is dried, heated until the sensitized emulsion, which was previously put on the plate, is burned to a hard enamel. This process makes the enameled surface acid resisting.

The zinc plate now consists of the dots left by the screen and the intervening white spaces. The etcher removes these white spaces and preserves the dots. This is done by splashing nitric acid against the zinc plates, thus cutting out the exposed portions, leaving the dots. The plate is then cleaned, trimmed and hurried to the composing room.

High Speed Goss Press

This giant machine (right) is the latest 3-unit tubular press designed by the world's largest builders of presses. A crew of four control its 26 speeds from any one of 10 points. The papers are issued in a constant stream from the delivery unit which projects from the center of the press. Below is an cnlargement showing this delivery and the folder which cuts, folds and counts every paper.





The Newspaper Press

It is a thrilling and fascinating experience to stand in the Gazette press room just as the large 55 ton Goss press begins to get out an edition. One moment there is silence. The next a gradually mounting crescendo of sound, part hum, part roar, throbs throughout the room. A continuous stream of Gazettes begins to pour from the press. At its high speed it cuts, folds, and counts eight papers per second, 30,000 per hour.

This press installed in November, 1935, is the latest development in the service of fast printing. It will print four colors, tabloid or full size. It is a huge machine, 50 feet long, 11 feet high, carrying 6,000 pounds of paper, three 1,000 pound rolls at each end. In printing 15,000 Gazettes the new Goss unitube press "chews up" 22 miles of paper, 6,798 miles per year. In 12 months it consumes \$22,000 worth of paper, a trainload of 17 cars. It uses 8½ tons of black ink in a year.

A 75 h. p. electric motor drives this speedy giant. A crew of four trained men spend the morning cleaning and oiling the press, adding new rolls of paper and taking care of necessary adjustments to make sure that everything is in readiness when press time arrives.

In spite of its size and heavy structure, the press is so accurate that paper three one-thousandths of an inch thick is threaded between a series of rollers and plate cyllinders and inked with a coating of ink so thin that it dries within a few feet at a high speed of 11 miles per hour. The ink is made of lamp black, aniline dyes and oil, and comes in large barrels from Detroit. The paper is manufactured in Wisconsin.

From the press room printed and folded Gazettes flow in an apparently endless stream into the mailing department. Here the race against time reaches a climax.



Mailing Room

Section of Gazette mailing department where papers for farmers and subscribers in outlying towns are wrapped and hurried on to waiting automobiles. Papers going by mail are addressed, folded and wrapped in this department.

Gazette readers must get their paper on time. The evening meal wouldn't be complete without it. Even in cities 40 miles distant, the Gazette is delivered almost as soon as it reaches Janesville homes. To make sure of this splendid service, the Gazette hires 110 newsboys and carriers in Janesville and enough boys to cover each of the 32 communities.

Rain or Shine, Gazettes Are Delivered



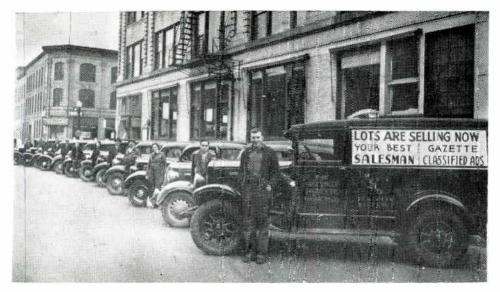
Group of city carriers who are trained to give Gazette subscribers fast and courteous delivery service. The business experience they get in connection with the handling of their route details proves invaluable to them years later.

There is no training school more effective than the Gazette carrier system in giving a growing boy a real opportunity to develop himself. When a boy has passed through this rigorous training he has proved his honor, his ability to work hard and to handle money, to sell, to meet all types of people with dignity and poise, and to sfand on his own feet. Banks and other institutions often look to Gazette-trained carriers for apprentices.



These boys are "helpers" to the regular carrier boys and must spend an apprenticeship before being assigned to a regular route. Boys are eager to have a Gazette route and make application months ahead.

Gazette Cars Travel 900 Miles Daily



This fleet of 12 cars hurry Gazettes to farm homes and to waiting carrier boys in the 32 towns and communities served by the Janesville Gazette.

Every day at press time 12 drivers load their fast cars with thousands of newspapers and are dispatched to these 32 points covering southern Wisconsin. Albany, Afton, Albion, Avalon, Brodhead, Brooklyn, Cambridge, Clinton, Darien, Delavan, East Troy, Edgerton, Elkhorn, Evansville, Fort Atkinson, Fontana, Footville, Hanover, Johnson Creek, Jefferson, Juda, Lake Mills, Lake Geneva, Milton, Milton Junction, Palmyra, Orfordville, Rome. Sharon, Tiffany, Walworth, Waterloo, and Whitewater. They travel 900 miles every day, 278,100 miles per year, burn 18,480 gallons of gasoline yearly. with a total cost to the Gazette for this dependable service of \$12,000 yearly. It means that the Gazette is the daily newspaper of each of these communities, just as though it were printed there.

The mailing department uses 2,600 pounds, or 142 miles of twine, and 10,000 pounds of wrapping paper annually. Close to \$30,000 is paid each year to carrier boys and agents in Janesville and the outside territory.

Gazette Carrier



"Pepper". female cocker spaniel, performs splendid service as the Gazette "carrier boy" on the farm of A. G. Austin, route 6. Every afternoon, when the paper is tossed at the gate by the Gazette car, "Pepper" makes a quick dash to get it and delivers it to the front porch.

From Logs to Newsprint

You have stood in the Gazette pressroom and watched the hungry press transform yard after yard of white paper into completed Gazettes.

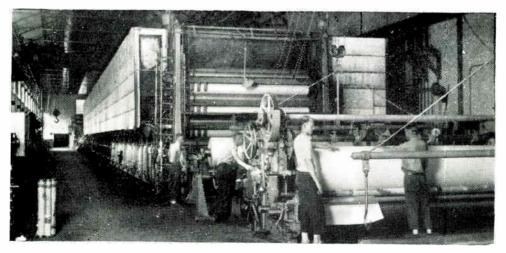
The making of Gazette newsprint paper from logs that come from the far northern woods, is a complete and dramatic story in itself. The story begins in the snowbound northern timberlands where trees are felled in the dead of winter. The wood used is mainly Wisconsin Hemlock, Minnesota Spruce and Canadian Spruce, also some Minnesota Canadian Balsam is used in the manufacture of paper. The logs are cut into four-foot lengths and hauled to the bank of a stream to await the spring thaws. When the ice is melted, hundreds of thousands of logs are floated downstream to the log mills.

It takes approximately 675 cords of wood to make 500 tons of newsprint paper, which is the quantity the Gazette uses annually. In the term of several logs, the paper involves about 45,000 pieces, eight feet in length and four inches to eight inches in diameter. Expressing this amount of timber in the terms of one giant tree, 500 tons of newsprint paper would require one tree 70 miles high. During a year, the Janesville Gazette uses about 10,000 trees covering 100 acres.



The Gazette's purchase of 500 tons of newsprint provides employment in the woods, on the railroads, in the saw mills and paper making plants for about 1000 men.

Newsprint used by the Gazette is made up of 75% ground wood pulp and 25% sulphite pulp. The former is made by forcing the logs under pneumatic pressure against huge grindstones. Water flows over them all the time, and from the bottom of the machine comes a steady stream of pulp. Slivers and resinous materials are removed, fresh water is added and the pulp is ready to go to the mixing tanks, where sulphite pulp is added to it



This giant paper making machine changes pulp to paper for the Gazette.

Ground pulp is necessary to give the paper the porous-like characteristics which enable it to absorb ink on the high speed presses. Sulphite pulp gives the paper strength and flexibility. Sulphite pulp is made in steel cylinders lined with brick, about the height of a three-story house. These are called digesters. They are filled with wood chips and as much bisulphite of soda as the digester will hold. It is then sealed, live steam is forced in and the mixture is cooked under pressure for eight hours. At the end of that time the whole mass is blown out into a huge vat where it is washed with water for hours. It is then ready to be mixed with ground pulp and made into newsprint.



Newsprint comes to the Janesville Gazette in large rolls as shown above. These rolls weigh about 950 pounds and more than a thousand are used in a year. After the heavy brown wrapping paper has been removed from the rolls they are ready to be hoisted by an electric crane to proper position on printing press.

In the mixing tanks, ground pulp and sulphite pulp are mixed with pulp made from waste paper, white clay which acts as a filler, bluing and alum. These are all beaten together, more water is added and the pulp is pumped into boxes the width of the paper machine. From these it overflows into fine wire screens, on which it is almost instantly converted into paper. These screens are in the form of an endless belt. The pulp passes over it, the water drains off and a jogging side motion of the machine causes the pulp fibers to interlace. This is paper.

When the paper leaves the screen it passes between large rolls that squeeze out still more water and dry it. From these it passes through 32 drying cylinders filled with live steam and covered with blankets to absorb the moisture. The final touch to the paper is given by steel calender rolls which polish the paper and give it a smoother finish. It is then rewound, wrapped in extra heavy paper, and loaded in box cars, ready for shipment to its destination.

A Living Thing

No description of materials and machines for making newspapers can convey the spirit of the Janesville Gazette, its friendliness and understanding, its progressive leadership in the welfare of the community, its constant battle for the rights of the taxpayer and worker. To thousands of readers the Gazette is a living thing. It has the bearing and strength of character of a familiar friend. This making of a "strong" newspaper is not an accident. It is the combination of forward-looking principles of the publisher and editor, the training and abilities of writers, advertising men and women, photographers, newsboys, and others who put all their efforts together in producing the best newspaper for this community.



The Voice of Southern Wisconsin

Several years before radio became a reality to most of us, the Gazette foresaw the place that it was destined to fill in the home life of every family in this large community. On the horizon was the certainty that news by radio would be almost instantaneous, that this community should have a radio station, and that broadcasting here should be directed by an organization whose interests and activities are close to the people as a whole.

With this in mind, the Gazette established in 1930 a new radio station, WCLO. Women's organizations, city and county officials, colleges, civic groups, individuals and business men in Janesville, Beloit and neighboring communities took advantage of this modern medium in reaching the people in their homes. All who use the station are warmly received, and its facilities and time are placed at the disposal of all who have the welfare of the community at heart.

To untold thousands WCLO became a theatre, a concert hall, a sports arena, friend to the lonely, companion to the shut-in, helper of the housewife, the immediate source of information in any emergency. To all of them WCLO is "our radio station".

They find in the Janesville Gazette useful radio news and all WCLO daily programs, while on the air WCLO brings them the spot news of Southern Wisconsin and Northern Illinois reported by the large suburban Gazette staff. Domestic and foreign news from WCLO Transradio teletype wires is broadcast hourly.

Radio Personalities

"The Voice of Southern Wisconsin" is endeared to mothers, fathers and children listening in their homes because they feel that they know the artists. Only radio can convey this personal appeal of a familiar voice, and WCLO's personalities keep a ring of friendliness in their expression. Their pictures often appear in the Gazette so that listeners may know them.

A daily broadcasting schedule of 15 hours requires a tremendous amount of preparation. On the air, every night is "opening night". Each program is an entity, and there must be no "let down" in plot, appeal or interest. WCLO continuity, which is the material for broadcasting, keeps seven writers busy. Every day, seven days a week, the WCLO staff of 17 produces and presents 53 programs. They prepare 19,080 broadcasts a year, besides directing, broadcasting, acting, singing, etc.

A perfect program, means close harmony of all involved. In these studios, four announcers work with the artists. Three highly trained technical engineers keep the controls and circuits perfectly tuned. The tiny microphones are so super-sensitive that they will pick up the sound of a watch ticking and the beat of a heart.

WCLO modernistic transmitter house with new 260 foot welded steel radiator antenna, located at 1400 Oakhill Ave., Janesville.



The Brain Center



James Shelton at the control desk in WCLO studios. All microphone lines for studio and outside broadcasts converge at the "brain center" to be relayed to the transmitter station.

Music and sounds you hear from your radio set are transmitted by the radio station on radio or carrier waves. The sound waves are produced in the studios or at any place where a broadcast telephone wire can be installed. Sound waves travel through air in all directions, as waves travel out from a stone tossed into water. however, They, will travel only a short distance, while carrier waves will travel many miles.

A microphone is a mechanical ear, and like the human ear, it has an ear drum, or vibrating diaphram. The vibrations

set up by sound waves are transmitted as electrical impulses over special telephone wires, instead of nerves, as in the human body. Every musical note has a set number of waves, or cycles per second which determines the pitch of that note. They are transmitted instantaneously over the wire from the studio control room to the WCLO transmitter on Oakhill Avenue, at the south limits of Janesville.



S. H. BLISS Mgr. WCLO.

Because radio waves will carry much farther than sound waves, they are used as a sort of beast of burden, the sound waves riding on the radio waves, much as a rider is carried by his horse.

In 1936 WCLO took a great step forward with the construction of a completely new broadcasting station. The station house is strictly modern in architecture and a model of good taste in decoration. It combines all the convenience of modern living.

In the transmitter house is a room where the carrier waves are produced, with a broadcast technician always on watch to keep the electrical currents in control. The transmitter itself is a steel cabinet, six feet high, three feet square, filled with tubes, condensers, transformers and other apparatus for generating radio energy. When the sound and carrier waves are combined in the transmitter they are sent out on the air from WCLO's 260 foot self supporting, insulated mast. This triangular welded steel tower is the highest of any local radio station, and is the latest development of structural engineers.

To match this transmitter WCLO installed completely new studio equipment with remarkably sensitive Western Electric microphones, new control room assembly and portable broadcast transmitters to extend the station's service to pick up field events such as sports, street interviews, and other special activities.

Broadcasting from Scene of Action

A network of telephone wires from the Janesville studios to communities several miles distant provides for regular remote control broadcasts. Thus Beloit, Delavan, Milton, Fort Atkinson, Whitewater and other towns in this area take the air and WCLO is a vital part of their community activities.

No broadcasts are more intensely interesting to listeners than informal interviews and descriptions of events at the scene of action. For this reason WCLO is extending its facili-



WCLO's "The Man on the Street", interviewing children and adults. Their reactions to personal questions interest and amuse a vast audience.

ties wherever possible to remote pick-up points both by wire and short wave. "The Man on the Street" programs are among the most popular, along with hockey, basketball, and other sports.

Field broadcasting at the scene of action was revolutionized with WCLO's portable broadcasting sets. This 35 pound pack set is strapped on the back of the operator so that he is able to move anywhere with perfect freedom and without the encumbrance of telephone wires. His tiny transmitter has a range of 10 miles, sending his message by ultra short wave to the central transmitter to be rebroadcast on regular long wave.

If the pack set operator is to broadcast an important event more than 10 miles from the radio station he travels with a second operator in the WCLO relay transmitter car, completely equipped to amplify and relay his messages to Janesville. The mobile relay transmitter has much greater power than the pack set, allowing the station to broadcast anywhere within 60 miles at the spot where and when the action occurs. Thus the operator with the pack set broadcasts by ultra short wave to the mobile transmitter in the automobile, which relays the message by short wave to the central sending station in Janesville, thence to be broadcast to the listener.



Everyone Enjoys WCLO Music

WCLO might be called "The Voice of Tomorrow" for the spirit of the entire institution is tuned to the minute. In the studio the smartness of modern color and design, all in good taste, harmonize with the tempo of up-to-the-minute broadcasting. The effect is artistic and pleasing. Every piece of equipment combines the new technique of radio high fidelity, even to the loud speaker and microphone. It reflects the progressive leadership which places WCLO well ahead in the national field of broadcasting.

Modernistic "Studio A" is WCL(s spacious music room. Everyone enjoys the music of WCLO's



Della Deen Orr, WCLO's versatile musical director, at the console of the studio symphonic organ. Her "Children's Hour" each Saturday, "Dream River", and piano recitals appeal to entire families.

studio symphonic organ, an unusual instrument designed especially for broadcasting and used for solo as well as accompaniment. It is so constructed that an entire symphony orchestra can be imitated, with more than 1,000 pipes to simulate the sounds of the instruments.

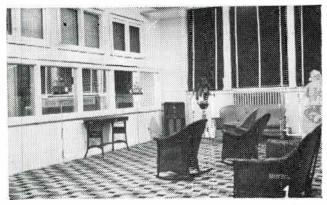
The station is proud of its musical programs, for its entire array of talent, music library, and instruments provide infinite variety and genuine quality. Its three grand pianos are kept in perfect pitch, with expert tuning every two weeks. Atmosphere for every type of program is made natural by experienced showmen and studio sound effects. "Studio B" is fitted for dramatic programs.

No one questions the place which WCLO holds in the hearts of thousands of Southern Wisconsin and Northern Illinois listeners. That was proved dramatically during the blizzards in February, 1936, when the Gazette and WCLO threw open their entire facilities to aid those in distress. Additional action broadcasts from Beloit's flood scene in 1937 and other points of special news interest have gained for the station the whole hearted support of the great masses of people.

WCLO Welcomes You

Visitors are always welcome at WCLO studios. As you enter the beautiful reception rooms a courteous hostess greets you. If you are interested in viewing the broad-

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Spacious WCLO reception room with a seating capacity of 150.

sted in viewing the broadcasting studios, or the equipment, she will be delighted to escort you on a tour of inspection.

If your out - of - town guests have not had an opportunity to visit a modern radio station a most cordial invitation is also extended to them. WCLO is an institution of service to all who would enjoy and use its facilities.

WCLO The Voice of Southern Wisconsin.

Broadcasting Anywhere, Anytime, Unannounced

WCLO is equipped to broadcast in any emergency.

Wherever news is made, when it is happening, the Gazette and radio station combine to cover the event with pictures, news reports, radio broadcasts, and even transcriptions made on the spot.

Whether it be a style show, an election, a large golf tournament, fire, tornado, flood, or just an ordinary day with ordinary people at their ordinary work, WCLO's mobile broadcasters are on the job to describe what is happening and talk informally with the interesting people who make news.

No longer do the limitations of extending telephone wires hamper WCLO from broadcasting where action is taking place. The new portable pack set and mobile transmitter give the station unlimited opportunities for presenting vitally important and interesting events.

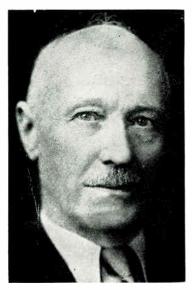
An entirely now way of describing at first hand what the merchant offers was made available with the portable transmitter. With his pack set on his back, the announcer walks directly into the merchant's store, describing what he sees. Through his eyes, the listener actually sees and feels the merchandise offered. The announcer interviews salesmen, customers, and tells what is happening in the store. He helps the housewife



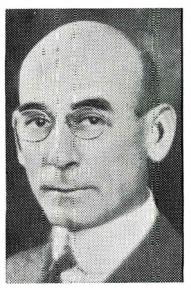
With the portable pack set strapped to his back, the operator-announcer broadcasts anywhere he can walk.

to select good buys and saves her time in shopping, for he may describe for her a pattern she saw advertised in last night's Gazette. He asks the dealer where he buys his goods and how he tests them, letting the dealer himself talk to the listener so that the old time personal contact between storekeeper and customer is again established.

The portable broadcast program is one reason why listeners keep their sets tuned to WCLO, for they know that the most interesting, spot news broadcasts may happen any time, anywhere, unannounced.

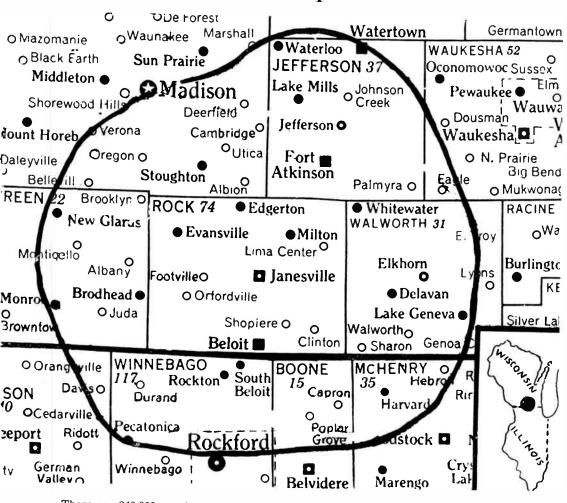


STEPHEN BOLLES Editor



H. H. BLISS Publisher

WCLO's Best Reception Area



There are 240,000 people in this neighborhood who can hear WCLO clearly. Thousands of listeners were added to the station's audience following the construction of the new 250 watt transmitter and high fidelity equipment which now brings them a quality of radio reproduction which is on a par with the finest stations on the air.

Remote broadcasts are being made from many of these communities, while representatives of most of them are appearing from time to time direct from the studios in Janesville.

Right here in Southern Wisconsin and Northern Illinois are some of the most productive farms in America, rural families in this area enjoying a cash farm income of nearly \$27,000,000 a year. An additional \$38,000,000 in spendable incomes is received regularly each year from industries, stores, professions, etc., according to a recent survey taken by the Gazette and WCLO Research department from government statistics and direct inquiries answered by officials of industries and heads of other institutions.

The area where the Gazette has concentrated circulation is the same as enjoyed by WCLO, illustrated on the above map, with the exception of Beloit, Watertown, Stoughton, Monroe, New Glarus, Oregon, and the cities in Northern Illinois which are not in the newspaper territory.

