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Abstract

It was the purpose of this study: (1) to define reading readiness as it relates to a child's life experiences, or his experiential background; (2) to review the literature concerning the readiness factors that influence a child's learning to read, and to review several picture instruments which would test the experiential background of the pre-reading child; and (4) to analyze the results, discuss the educational implications, and give recommendations for future study. Reading readiness must include the child's complete background for learning in terms of his maturation and experience. The child's background for learning or his experiential background is his knowledge of common objects gained through direct concrete experiences. A review was made of existing picture instruments. The SRA Test in Reading, the Peabody Picture Vocabulary Test, and the Pre-Reading Skills Program were examined. None of these instruments were found to have adequate picture material or to measure experiential background. The researcher then gathered colorful photographs for the construction of a picture instrument to measure experiential background of the learner. The research instrument was given in the spring and summer of 1978 to 39 pre-readers. The Peabody Picture Vocabulary Test was also given for comparative purposes. A comparison of the means of the raw scores of the two instruments yielded a difference of only five. The research instrument was considered to be an appropriate test for the present research population. Additional research should be done in the future to further explore the learner's experiential background.

THE DEVELOPMENT OF A PICTURE INSTRUMENT TO MEASURE THE EXPERIENTIAL BACKGROUND OF PRE-READING CHILDREN

A SEMINAR PAPER

Presented to

the Graduate Faculty

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by

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CHAPTER ONE

Overview of the Study

Readiness in all of its major and minor aspects is the teacher's first consideration in working with beginners (Hildreth, 1950). The teacher feels that she should know each child's individual needs, skills, and habits. It is only through learning this information that she can improve her methods of instruction and provide every child with the best possible education.

Statement of the problem

It was the purpose of this study: (1) to define reading readiness as it relates to a child's life experiences, or his experiential background; (2) to review the literature concerning the readiness factors that influence a child's learning to read, and to review several picture instruments of the pre-reading level; (3) to develop and administer an instrument which would test the experiential background of the pre-reading child; and (4) to analyze the results, discuss the educational implications, and give recommendations for future study.

Reading readiness can be stated as "the background for learning in terms of maturation and experience" (Hildreth, 1950). The term must include the total development of the child--his intellectual, physical, social, and emotional development. One must consider the child's mental maturity--the ability to think, to reason, to learn, to observe, to be curious, to remember, to follow directions, and to deal with the ideas of his own level of understanding. The child's powers of visual and auditory discrimination are therefore part of mental maturity.

The child's physical development involves; vision; hearing; speech--including oral language development, listening, vocabulary; and large and small muscle control. The child's social and emotional development emerges partly from his self-control and self-reliance as well as from group participation and interest in learning.

Also to be discussed in the present study is the experiential background of the child. The child's background of experience is his knowledge of common objects gained through direct or concrete experience with situations in his environment. The child will only give meaning to words and sentences when he has this background of experience upon which to draw the meaning. For example, the child may learn to say and recognize the word "dog," but unless he has seen a dog, petted it, listened to it bark, felt its sticky tongue, and romped with it, he can not properly conceptualize "dog." It is desirable for the child to have many direct experiences with people, places, and objects. Obviously, a child's background of experience is interrelated with his physical and mental capabilities, as well as the socio-economic level of his home environment.

Yes, the social and economic background of the home does affect the child preparing to learn to read. This is a large complex problem. The child from a low social and economic background may not have opportunities or means to have all the life experiences of the average or middle class youngster. The child may not be able to have a dog or have a book about dogs or even see a dog on a television set. Yet a child from a low social and economic background may have a color television which provides him with as many passive life experiences as a child from an

above-average family with a yacht, a penthouse apartment in Chicago and a summer cottage having real life experiences.

The opposite is true also of children from high socio and economic backgrounds. These children may not have anyone who will take the time to give them the life experiences that their wealth can afford. Yet these children often do have many rich life experiences provided by their social background.

Therefore social and economic backgrounds often provide the opportunities and means for children to receive rich and varied life experiences. Children can receive enough passive life experience through color television, radio, and stereo and cassette players to give them average backgrounds for reading. Because of the controversial nature of the how and why of socio-economic levels of the home, this factor was not considered in depth in the present study.

Language experience is closely related to experiential background. The child draws upon his experience with a new concrete object or situation to learn new vocabulary words. He expresses in his own oral language pattern his reaction, be it delight or dismay with the new experience. As Paul Diederich (1936) stated:

> "In the beginning of a child's life, there can be no conflict, no separation between language and experience. A child cannot learn a word without hearing it repeatedly in connection with the object or event to which it relates" (Gray, 1944).

Need for Study

Children enter school when they have had their fifth birthday prior

to December first. Some children progress along the teacher's set of behavioral objectives for the class and some fall short of the teacher's minimum requirements. When a lesson is presented, some children are not able to assimulate the concepts and information because of their lack of life experiences.

The above problems led this author to seek answers by investigating reading readiness - what constitutes readiness and are there any tests available to measure the background of experience?

In order to measure the child's various reading skills, the teacher most often selects a current commercial reading readiness test. Five of the major reading readiness tests are: The Metropolitan Readiness Tests, Murphy-Durrell Reading Readiness Analysis, Clymer-Barrett Pre-reading Battery, Gates MacGinitie Reading Test - Readiness Skills, and Harrison - Stround Reading Readiness Profiles. These tests attempt to measure the following skills: vocabulary development, listening, letter recognition, numbers, visual-motor coordination, rhyming words, phoneme correspondence, learning rate, auditory discrimination, auditory blending, word recognition, and matching. Not one of the tests measures attention span, cognitive learning style or experiential background (Rude, 1973).

Why were these skills not measured? Their exclusion does not indicate total unimportance. Cognitive learning style and attention span are part of the thinking processes of the brain. Researchers are still studying just how children learn. An important factor in children's learning was found by this researcher to be experiential background. This factor will be discussed further in the present study.

Commercial materials for language development are available. A

widely used course is the Peabody Language Development Kit. Through the pictures and questions the child's language development can be accelerated.

There are very few good instruments to diagnose the child's beginning experiential background. The enterprising teacher, who takes the necessary time, may design her own instrument to roughly assess the children's experiential background. Generally, the teacher will use simple line drawings in her instrument. The drawings may be confusing and une clear. Certain areas of interest or information may be omitted from the instrument. These tests are unpublished and virtually unaccessible to the vast majority of the teachers of beginning readers.

The classroom teacher is not trained in the mastery of constructing tests. The teacher training institutions advise the students to collect a file of pictures. The exact use is not always clearly explained. They may be just colorful bulletin board additions. Whatever the purpose of the pictures, the complete file takes years to assemble. The enterprising teacher will not construct the test the night before she intends to use it. The painstaking time involved to construct a good test has limited the number of tests available.

Scope of Study

It was the purpose of this study to carefully design an instrument to assess the experiential background of pre-readers. The instrument was a set of selected pictures. These pictures were copies of colorful photographs found in current magazines and publications common to households. These pictures represented the direct or concrete experiences of the pre-readers. Obscure pictures or confusing line drawings were ex-

cluded to permit clarity. The instrument included as many clear symbolic representations of the natural experiences of the children as possible. The final set of pictures was due to the subjective choice of this author.

The pictures of the instrument were chosen for another reason besides the natural childhood experiences. The pictures were only those of pure initial consonant sounds. No vowels, digraphs, or consonant blends were used.

Children four years of age who did not have formal reading instruction were shown the pictures to identify. It was the belief of this researcher that children having had many rich experiences would be able to identify 95 percent of the pictures shown to them. Children having limited experiences would be unable to identify any more than 50 percent. No attempt was made to assess the reasons why the children had varied experiences. This decision was based on the assumption that the varied experiences may or may not be the resultant effect of the socio-economic level of the home environment.

Methodology

In construction of this instrument colorful pictures were found and mounted on cardboard. This facilitated the presentation of the pictures. These pictures were chosen to represent people, places, and objects, within the realm of the experiences of the children. Among the areas of experience included were; family and home, playmates and playthings, pets, community helpers, vehicles and modes of travel, communication, farm, industry, nature, hobbies and sports, and zoo and circus animals.

After construction, the instrument was field tested by a small group of children not included in the actual research population. Approximately 30 four-year-old pre-readers comprised the research population. These children were shown the set of pictures to identify. Small groups of two to five children were tested at one time. The subjects were chosen from pre-kindergarten round-ups and day care classes. The locality of the children was a combination of the area surrounding the small rural village of Wonewoc, population 835, the rural city of Reedsburg, population 4,585, and the larger city of LaCrosse, population 51,153. For comparative purposes the Peabody Picture Vocabulary Test, (PPVT), was given to each child.

Results

The research instrument and the PPVT were given to approximately 30 children. Each test yielded a raw score which was the percentage of correct responses. A comparison was made of these raw scores, to determine if the research instrument was an adequate test of a child's experience and frame of reference.

Each item of the research instrument was reviewed as to the percentage correctly identified. The data gave this researcher some idea as to the appropriateness of the choice of pictures.

Definition of Terms

Experiential Background. Background knowledge of common objects gained through direct or concrete experiences.

Reading Readiness. Child's complete background for learning in terms of maturation and experience.

Pictures. Colorful photographs which symbolically represent the child's experiences.

Pre-readers. Children four years old who have not begun formal reading classes in kindergarten or first grade.

Limitations - Assumptions

1. This study was limited to the experiential background aspect of reading readiness.

2. It did not measure the obvious interplay of the various readiness skills of oral language and vocabulary growth, socio-economic levels, visual and auditory acuity with experiential background.

3. The results of the research were limited to the population used. Caution is advised in any attempt to apply the results to children in general.

4. The sampling was not random, rather subjects were chosen on their availability and age.

5. It was assumed that each child had had at least passive experiences from radio, television, etc., upon which the researcher would illicit oral language responses to the research instrument.

CHAPTER TWO

Review of the Literature

Teaching the young child to read has been the goal of educators ever since the days of Classical Greece. We can tell how great a concern this has been because of the educational and public concern with reading failure.

Reading pedagogy has been derived as much from revelation as from experimentation or observation. The most common remedy for the reading malaise has been to change teaching programs. In the days of the pioneers, the Horn Book and the ABC method were used. The teacher would drill the ABC's by having the children recite: "A is for apple, B is for baby, C is for cat." The children also did much spelling of words. This drill later gave way to the whole word procedure. We may also call them sight words in the basal programs. The basals were superceded in popularity by phonics. In more recent days, new and unsubstantiated methods have been used. ITA, linguistics, Words In Color, programed readers, machines and computers, and experiential materials are some of these methods. (Venezky, 1970).

Also of great concern has been the nature of the reading process. Reading research has been done for some seventy years. Beginning with the publication of Huey's Psychology and Pedagogy of Reading in 1908, research has been done in spurts of interest or sweeps of the pendulum on the current trend. Research has been done by psychologists, scientists, physicians, educational psychologists, and educators. So much has been written that it was impossible to present all the research on the nature of the reading process and the proper methods for inducing literacy in

the young in so brief a space. The important factors in reading readiness as they relate to the reading process were presented as they appeared to this researcher.

Educators have tried to devise ways and means of testing children to determine their present reading ability. Some have tried to predict future reading success. A review of several of these picture instruments of the pre-reading level was included.

Guiding each young child to learn to read is one of the most important jobs of the primary teacher. This task requires that the teacher understand the nature of reading readiness and the interrelationships of its components.

Donald C. Cushenbery (1969) stated:

> The term "reading readiness" suggests that a child has reached a level in his educational growth when he is able to read without obvious discomforts of a physical, psychological, or emotional nature.

He has also presented what he feels are the important factors of reading:

> . . . social development, mental capacity, background of experience, physical characteristics (such as the ability to make auditory and visual discrimination), and general language development.

Other ideas of reading readiness have been popular through the years. Mabel Morphett and Carleton Washburne (1931) have concluded:

> It seems safe to state that, by postponing the teaching of reading until children reach a mental age level of six and a half years, teachers can greatly decrease the chances

of failure and discouragement and can correspondingly increase their efficiency (Venezky, 1970).

This idea of readiness was accepted until men such as Arthur Gates questioned the mental age theory. Gates (1947) accepted the practical view of stages in reading development. He stated:

> When we say that a child has reached a state of "readiness" for reading, we mean that he has developed certain interests, abilities, information to a point sufficient to guarantee, under normal circumstances, success in actually learning to read.

The components of reading readiness he feels are:

> ... . the ability to understand and speak English; the ability to pronounce words and sentences in acceptable forms; the ability to pay attention; the acquiring of a wide range of word concepts and understandings through early language experience; the ability to interpret pictures of different types; the ability to use various common objects, such as crayons, scissors, books; and the familiarity with words through books and parents' interest (Gates, 1947).

Therefore according to Arthur Gates, reading readiness begins in infancy with the learning of important initial lessons and continues throughout the child's development. Reading readiness is more than just a special form or expression of general maturity. A child's reading readiness should be appraised according to these criteria: intelligence or verbal aptitude, vision, color blindness, hearing, handedness, speech, health, vigor, and emotional stability.

Gates has the following to comment on background of experience and information:

> Children come to school with a great variety of preceeding experiences and a great range of information. Some children may have come from homes richly equipped with educative materials and favored by continual and intelligent guidance and instruction from the parents of other persons. They may have been taken on trips, have been to stores, to the country, to the seashore, the zoo, and many other places where first-hand experiences have been gained. They may have had extensive opportunity to learn from conversation with many persons, from picture books, from experiences with concrete materials, and from reports from many friends, both young and old. At the other extreme, one may find a child whose home has provided little educational opportunity of incentive, whose environment has been severely restricted. Two children of equal native endowment may thus present themselves at school with very different amounts of experience in learning and of information.
>
> There can be little doubt that, other things being equal, the wider and richer the child's experiences and the greater his range of information, the better he is equipped to learn to read. The underprivileged child is not only a less experienced learner but he may lack the concepts essential for full and clear understanding of much that he reads. The child, for example, who is very acquainted with the farm and all that goes on there, has a background of interest and of understanding

Several of the various picture instruments were examined. Science Research Associates have published materials for use with young children. The University of Wisconsin-Madison Reading Laboratory has been active in developing the Pre-Reading Skills materials, commonly known as PRS. Also available was the Peabody Picture Vocabulary Test. The last test dealt with children's vocabulary or their language.

Science Research Associates (SRA)

Louis P. Thorpe, D. Welty Lefever, and Robert A. Naslund co-authored a partial picture instrument. They have written the S.R.A. Achievement Series in Reading and Arithmetic. During the years 1954 to 1964 the test was published for grades one through nine.

The only subtest to present pictures was the verbal-pictorial association subtest. This was only presented in the grade 1-2 form of the test. Because words were presented with pictures, the test was designed to measure general reading ability. The scores of this subtest overlapped vocabulary and comprehension. Average and above-average readers benefited from this assessment of their reading ability without undue frustration. Poor and below-average readers had difficulty with the test.

The manual of the test indicated that the test scores provided a basis for discovering and correcting the causes of poor achievement. The vocabulary used was very difficult even for 1st grade children. Geyser and volcano were not familiar to children of this age. The material seemed to be a challenge even for the best children in the grade. Low scores resulted for a large majority of pupils in the

below-average socio-economic areas of the community.

The vocabulary was hard and challenging even for the best. Vocabulary was also tested in context by the presentation of story units. The SRA Acheivement Test in Reading was not found suitable for any use for pre-readers. This test told this writer what not to develop in any future studies.

Upon closer examination of the author, Louis P. Thorpe, the researcher learned that Thorpe considered meaning, language and the written word close realities. Thorpe has written on child psychology and also the growth and development of the child:

> Vocal language is the vehicle by which the child communicates his ideas, his wishes, and his attitudes to other persons. The capacity to exchange words and other symbols of ideas and feelings serves to satisfy a variety of needs. It is through this avenue that children secure not only information but a great deal of experience. Language is a means of both personal expression and social communication. It is, indeed, one of the principal factors in personality and social development.
>
> This ability to use words in verbal comminication is dependent for its development upon both environmental stimulation and physical growth. A child cannot use word symbols -- and words are symbols of experiences -- until he has reached a stage of maturation which makes possible such an intellectual activity. (Thorpe, 1962)

Thorpe has stated by these words that readiness to read is a resultant of the environment supplying experiences and the child's physical growth in development and language.

Thorpe also reported the nature of children's vocabulary in terms of the child's experiences:

> The child's qualitative use of words also shows marked development with increasing age. Because of his experiences with them, the child comes to know the meaning of events, objects, and to some extent the behavior of people. Objects take on more and more meaning as the child manipulates them through feeling, pulling, striking, lifting, throwing, dropping, rolling, or in smelling, testing, or hearing them. The four-year-old child is likely, for example, to define chair as "A chair is to sit on" and car as "A car is to ride in." Such words have meaning for him in terms of possibilities for action (Thorpe,1962).

In the SRA test, the authors had presented an accelerated vocabulary. Thorpe had investigated the growth of children's vocabulary. Thorpe found that:

> . . . from the ability at age one to use 3 words, the average child develops to the extent that he can use 896 words at age three, and 2,562 at age six. From this point, size of vocabulary continues to develop, at a rate commensurate with the child's home environment,

educational opportunities, and desire to improve, to approximately 15,000 words at the time of graduation from high school, (Thorpe, 1962).

In keeping with the philosophy of verbal meaning and challenges, the SRA readiness material was not found to be easy. The Learning to Think series was published in 1967.

These statements from the teacher's manual presented the reason for the complex line-drawing pictures in the series:

> The SRA Learning to Think series has been designed to answer a problem facing every teacher of young children -- to find educational things to do that pupils consider interesting.
>
> While the books in the series constitute reading readiness material, they go further and provide direct intellectual training in primary mental abilities.
>
> Verbal meaning is stressed throughout the series. The vocabulary level of the series is not limited to the child's speaking vocabulary. Rather, it is aimed at his total "comprehension vocabulary". Children are like adults in their ability to understand a great many more words than they use in speaking, and recent research has shown that the number of words they understand is much larger than has previously been supposed.
>
> More than 1,200 different pictures have been used in each book, many of them presenting complex situations.

> These pictures represent different objects and ideas, so that the child acquires new vocabulary and new concepts with every lesson (Thurstone, 1967).

The series consisted of four workbooks. Each one contained: space thinking: - pattern copying, completion, mazes, and figure comparison; and qualitative thinking: - counting little pictures. The rest of the pages were similar to the ones presented in Appendix C. The pages have many line drawings.

On page 18, (see Appendix C), the pictures are all of equal size. A bar of soap is the same size as an entire cow. A pair of socks is the same size as a pony. If the child is to mark: "(3) the duck, the sweater, and the rabbit," he must decide between real and play things and pictures of varying relative size. The child has these problems to overcome before he can consider the vocabulary and verbal meaning.

On page 25, line two, the girl who lives where it is very cold can be picture 3 or 4. On page 33 in the first row, the anchor and key look too similar for a first glance of the child. In the second row, the first picture looks like a party hat as well as a stopper. If a child is considering the hat as his first impression, he will have difficulty with what it is a part of.

On page 84, the trapeze and the Indian would be hard pictures for the children. The child must again decipher the part-whole relationships of the pictures, use classification skills for the tools, and toys, and at the same time listen for the teacher's goal of auditory discrimination of the /t/ sound.

The child certainly is challenged, (sometimes to the frustration

point, or is at best confused), when he looks at the SRA pictures. These materials could not be considered for all children. Not all children could meet the extreme challenge of deciphering the pictures and using in combination many mental skills.

Peabody Picture Vocabulary Test (PPVT)

Another test or picture instrument was the Peabody Picture Vocabulary Test (PPVT). It was published in 1959 by the American Guidance Service, Inc.. Lloyd M. Dunn, the author, intended the PPVT to be an individual intelligence test which would give an estimate of the subject's verbal intelligence through measuring his hearing vocabulary. Dunn developed the test for use with special groups, such as people who demonstrate reading problems, speech problems, emotional problems, handicaps, and mentally retarded.

The PPVT is an untimed test which can be given in fifteen minutes or less by an examiner needing no special preparation. It consists of a picture booklet of 3 practices plus 150 test plates. Each has four numbered pictures. The examiner reads the stimulus word and the subject responds by pointing to or giving the number of the picture which best illustrates the word. The items are arranged in ascending order of difficulty. The subject responds only to items between his "basal" and his "ceiling" score. (see PPVT sample response sheet - Appendix D.)

The answer sheet gives the stimulus word, the correct response number (differs for Form A & B) and a space for recording the student's response. Thus scoring is made rapid and objective. The examiner places a mark over the item number of incorrect responses. The errors are counted and subtracted from the ceiling score. The student's total score can

be converted to percentile rank, mental age, or standard score IQ.

In developing the PPVT the author had line drawings made for 2,055 illustratable words (from a population of all illustratable words - 3,885) found in Webster's New Collegiate Edition, Second Edition 1956. These drawings are largely nouns and those illustratable actions which young children consider common to their lives.

The level of difficulty (ages 2.5 to 18) and item placement were determined on a sample of 360 subjects. The standardization was based entirely on 4,012 white children in and around Nashville, Tenn.. (This test has a wide popular use, moderate reliability and largely unestablished validity.) Lyman (1975) urges caution in interpreting the norms.

Ellen V. Piers (1975) of Penn State University, questioned the use of the PPVT as an intelligence test. She stated:

> One might question the author's assumption that recognition vocabulary measures verbal intelligence "in the same way" that verbal definition vocabulary tests are said to measure it, and that the demonstrated predictive value for school success of the latter is thus automatically transferred to a picture vocabulary test.

She also cautioned the use of this test when she said:

> ...be aware of what Guilford calls the "cognition of figural units" is only one aspect of the very complex domain of intelligence.

This researcher examined the picture plates of the PPVT for any obvious visual or perceptive obscurities. (see Appendix D) On plate number 31, Form B, the stimulus word is sail. The line drawings are: (1)

a goose in flight, (2) a propellor, (3) a nest, and (4) a sail boat on water. Frames 1, 2, and 3 are isolated fragments of wholes, whereas frame 4 has the figure (boat) grounded. It is conceivable that a student could choose frame 1 or 4 as sail.

On plate number 44, the stimulus word is cash. The line drawings are: (1) a bowl with a cracked and broken side, (2) a twisted length of cord or wire, (3) a gift or present, and (4) change or coins. Often this researcher has had children choose frame 1 (crack) instead of 4 (cash). This seemed to be more a test of auditory discrimination than vocabulary choice.

On plate number 48, the stimulus word is argument. The line drawings are: (1) two men, one scolding the other; (2) a boy tumbling backwards down the hill; (3) a dentist examining the patient's mouth; and (4) a girl taking a bath. The student may know the word argument and still choose the wrong frame. The answer could be 1, 2, 3, or 4. To a child each frame may show an argument. (1) The men may be arguing. (2) The boy may be tumbling down the hill as a result of his argument with another person at the top of the hill. (3) The patient may have had an argument about seeing the dentist. Most children are not fond of seeing the dentist after the experience of his drill. (4) Not all children take a bath without first an argument. The choice of frames for the child depends upon his background of experience as well as his mental comprehension of the word, argument.

On plate number 53, the stimulus word is reel. The line drawings are: (1) a thermostat, (2) a bolt and nut, (3) a slide projector, and (4) a reel. A child may not know "reel" but may know, "real", its homonym.

To a child thinking the examiner has said "real", frames 1, 2, and 3 as well as 4 are real. The most real item may be frame 2, the bolt and nut. Because of the complexity of the homonyms, this plate can be very confusing even to the child who knows about the reel on a rod and reel.

This researcher found many other examples of poor illustrations, expecially in the confusion of figure-ground. The vocabulary words of 1959 may be outdated today. For example, bannister, shears, and cobbler are not common words.

Pre-Reading Skills Program (PRS)

A third test was the Skills Test of the Pre-Reading Skills Program (PRS). The PRS was developed at the Wisconsin Research and Development Center of Cognitive Learning (R & D Center) at the University of Wisconsin - Madison. This center is one of the university based educational research and development centers that are funded by the National Institute of Education. The R & D Center has had as its goal assistance to school systems in developing structures, procedures, and environments designed to help plan and carry out effective instructional programing for individual students.

In response to the problems of the conventional schools, the R & D Center developed its system of Individually Guided Education (IGE). This is a system to formulate and carry out instructional programs aimed at each child's instructional needs, learning style, and rate of learning. The PRS was developed as a curriculum component of the IGE system.

PRS was a new approach to prevent reading failure by preparing children for formal reading instruction. The researchers of PRS stated:

It has long been known that children who will require special help in learning to read can be identified at an early age, but this information was not utilized, and no effective procedures for helping these children were developed. Instead, the common remedy for dealing with reading failure was to try new methods of teaching reading, in the hope that the proportion of reading failures would be greatly reduced as a result. These methods were rarely based upon new understandings of reading or of learning; instead, they were derived mostly from popular discontent with existing procedures, mixed with a desire to find instant solutions. Each method succeeded in teaching reading to a significant portion of the total school enrollment, but each failed to improve the educational achievements of those who needed help the most -- the underprivileged and the slow learners.

PRS is based on the conviction that with proper instruction prior to formal reading, a significant number of reading failures can be avoided. The research behind the program is based on the rationale that reading is not a single skill but rather a composite of separate skills. The immediate goal of the research was therefore to identify specific skills that are integral to the reading process and that relate directly to reading success. The ultimate objective of the investigation was to apply new knowledge about the component skills involved in the reading process to the development of more effective procedures for preparing children for beginning reading (Venezky, 1974).

PRS concentrates of five skills which the researchers found specific to reading and learning to read. The skills are the most important for decoding and word recognition. There are three visual skills (letter order, letter orientation, and word detail) and two sound skills (sound matching and sound blending).

The program has a skills test booklet (see Appendix E) designed for use as pretests and posttests. The test booklet contains all the plates for the five subtests of skills. The three visual tests consist of letters and words. The plates of the sound matching test show a letter and three line drawings. Each plate has a drawing for the initial and the terminal sound of the consonant and a third choice. The examiner always asks for the initial sound picture. The drawings are not always clear, but the examiner says the names of each one for the child.

The plates of the sound blending test show a word and three line drawings. The line drawings were found to be sometimes unclear and confusing. Again the examiner says the names of the drawings. Because this subtest can be used as a pretest, it could measure the vocabulary and word concept development of the children.

The Pre-Reading Skills Program itself contains games and sound cards. The large cards for classroom use are colorful line drawings. The games sometimes have decks of little colored line drawings. The color was found appealing to young children. The drawings again were not always clear. A hen scratching for worms is presented for the /k/ sound. Without the teacher's identification, the picture can be bird, hen, chicken, or duck.

After carefully examining the Science Research Associates material, the Peabody Picture Vocabulary Test and the Pre-Reading Skills Program,

this researcher discovered trends in currently published material. The instruments all contained picture materials. Each consisted of line drawings. Only the PRS used color. No actual photographs were used. Each test contained confusing and unclear drawings.

For each test, the child would have to use his learned background of experience to answer the questions. This would be true of any task for any learner. However, none of the instruments were designed to measure experiential background. The instruments were designed to measure cognitive thinking, vocabulary and the visual and auditory skills necessary for beginning reading.

It was these findings that prompted this researcher to search for concrete pictures (photographs) which would measure the child's background of experience. It was the assumption of this researcher that experiential background must be a very necessary factor of reading readiness. This factor has not been explored in depth in previous research studies.

CHAPTER THREE

Original Research

The purpose of this paper was to examine reading readiness and to develop an instrument which tested the experiential background of the pre-reading child.

Dr. Emmett A. Betts in his book, Foundations of Reading Instruction, (1932), devoted several chapters to reading readiness. He commented on experiential background:

> Reading, or interpretation, requires a "talking to" the printed page; hence, a rich background of information is essential to comprehension. Experiential background, therefore, becomes one of the primary factors in reading readiness. Since the education of the child is not entirely a school affair, it follows that home background may be a factor in readiness for reading. Home influence is felt in a number of ways, including the quality and extent of experiences gained through travel and family discussions and the attainment of emotional and social adjustment (Betts, 1932).

Moreover, Dr. Betts stated what experiences he feels children should have:

> A required background includes both broad factual information and rich emotional experiences. Harmonious family life, freedom from unjustified home and school pressures to force language development, reasonable opportunities for experimentation, normal experiences with story telling, picture books, and worth-while literature -- all these contribute to

> the development of a rich emotional life. The child should become familiar with Mother Goose Rhymes, Christopher Morley's Animal Cracker, and the like... poetry, verse, and stories (Betts, 1932).

As a guide for teachers providing experiences to fill the gaps created by the home background, Dr. Betts gave various excursions for the class. Betts stated these to be typical experiences to be provided by the home:

> ...Walks through the park and countryside, for animals and plants ...trips to the library, post office, fire and police stations, stores, broadcasting stations, express and telegraph offices, and the like can do much to clarify notions about community workers. In some communities industrial excursions can be highlighted. Automobile factories, lime kilns, coal mines, lumber mills, creameries, sugar beet mills, railroad centers, printing plants, tile factories, steel mills, and green houses are rich and varied sources of experience. Learning should begin at home (Betts, 1932).

Other experiences stated dealt with arts and crafts, science and social experiences:

> ...arts and crafts activities are valuable for bringing children into direct contact with things. These activities include the making of friezes, housing facilities for animals, "orange-box" movies, booklets, puppets, lantern slides, toys, musical instruments, maps, charts, dioramas, panoramas, linoleum-block

> prints, carved objects from soap and wood, pottery and the like. Carefully selected and directed arts and crafts activities afford a means for direct experiences and for expressing experiences within classrooms.
>
> The study of plants and animals ...the care of plants and properly cared for pets ...capitalization on holidays, birthdays, entertainments, and dramatic activities (Betts, 1932).

The suggestions of Dr. Betts and Gertrude Hildreth were used by this researcher to develop areas of interest in experiential background. These suggestions helped to firmly establish in the mind of this author the belief that experiential background was as important a factor as any other to be considered.

The first list, (see Appendix A), of areas of interest were; household, furnishings, police, siblings, communications, pets, playthings, and playmates, modes of travel and vehicles, farm-dairy, zoo-circus animals, farm animals, factory and industry, grocery store or supermarket, fishing, tools, cooking, picnics and cookouts, department stores, park or gardens, travel, concert, music and parades, beach-riverside-lake, literacy, woods, literature, culture, sports, school, geography, post office, fire station, city, family and home, community helpers, and professions and vocations. Under each heading were listed nouns, that is, names of objects or people or places. For example, under the heading, tools, were listed; pliers, screwdriver, wrench, hammer, saw, ax, and ladder.

This activity satisfied the first criterion of finding the wealth of information and experiences with which children should be acquainted. However, this list, (Appendix A) was too large to work with considering the age of the research population. Moreover, the amount of pictures that were needed to make the instrument was excessive.

To narrow the amount of pictures for the instrument another criterion was used. Every word beginning with a vowel was omitted. Words such as airplane, elevator, ax, aisle, and exit were omitted. All digraphs and two and three letter consonant blends were omitted. Words such as pliers, wrench, and screwdriver were omitted. Only words beginning with simple initial consonants were used (e.g., bus, party, toys, salad).

To further narrow the list, any item with two commonly accepted names was omitted. For example, words such as: cab or taxi; football or ball; hatchet or ax; rabbit or bunny; chicken or bird, duck or goose; mother or woman; cork or bobber; couch, davenport or sofa; were not included.

With this narrowed working list the researcher chose magazines such as Time, Outdoor Life, Ladies Home Journal, Wisconsin Agriculturalist, and others common to many households. The researcher wanted pictures to represent the experiences of the children. The full color photographs found in magazines were felt to appeal to the research population.

Clarice Widell, in a study conducted at the University of Wisconsin-LaCrosse (1971), found the following true of the effect of pictures on children who are learning to read:

> In the area of learning to read, upon which there was more

agreement between opinions of writers in the field and teachers surveyed: pictures may miscue and may divert attention from printed words. That children should be taught to read from books containing pictures, that when a student is presented with a multisensory stimulation, the picture will most easily elicite the correct response, and the educators' need to be sensitive to childrens' visual literacy or ability to read a picture.

Teachers were of the opinion that books which include attractive pictures make the task of learning to read more pleasant and that criteria should be developed to guide illustrators, to help narrow the gap between the reality of the child's world and the world he sees pictured in books (Widell, 1971).

If children learning to read need attractive pictures, the pictures selected for the research instrument should also be appealing and colorful. The object to be identified should be clearly shown in the picture. For example, if the camel is to be identified, then only a camel should be shown. Other objects such as trees, zoo cages, and birds, should not be included.

After this researcher sorted many possible pictures, about one-hundred and fifty pictures were selected for inclusion in the present study. The areas of interest of culture and literature and story telling were large enough in themselves to be a seperate sub-test, therefore they were excluded. Music and parades were omitted because it was

too difficult for this author to find a picture of a parade or band which could be identified as only one object. Any pictures which could represent socio-economic status were omitted. For example, dishwasher, seaweed, waves, records, ramps, and rest areas on freeways were thought to be more appropriate for middle class children from a city and were therefore not included.

After this researcher had assembled the initial list of pictures (see appendix A), it was narrowed down to the working list (see appendix B). When many pictures had been gathered and sorted, the research instrument was constructed. The response sheet listed the pictures according to category. (For the exact listing - see response sheet preceding the research instrument in appendix G.) The following categories and number of items were included: zoo animals (8), home and family (12), pets, playthings and playmates (11), farm animals (4), farm (4), modes of travel (6), nature (8), hobbies and sports (8), community workers (12), and communication (10). A total of 83 pictures were included in these ten categories. One extra picture was chosen as the example item. The final choice of these pictures was the subjective judgment of this author.

Certain pictures were included because they are characteristics of a certain area. Canoe, barge, dam, and fishing were included because they are characteristic of the Mississippi River Valley around La Crosse. Milking, calf, and cow are more common to the small farming community of Wonewoc. Five pictures, reel, factory, chemist, town and city, were included as a challenge to the child with a wealth of background

experience.

The pictures were mounted on cardboard to facilitate the presentation of the pictures in the administration of the test. On the back of each picture was noted the category title, the response number, the name of each picture, and any acceptable alternative responses.

The response sheet (see appendix G) was constructed so that the test administrator could check the 'yes' column if a child answered correctly. Ample space was given so that variant answers could be recorded in the 'no' column.

The researcher arranged to give this research instrument to 39 four-year-old pre-readers. It was first field tested for reliability on ten pre-readers from day-care centers in LaCrosse and others in Wonewoc, These children were not included in the research population. This research was completed in the spring and summer of 1978.

The researcher gave the test to twenty-two children in Wonewoc and six children in Reedsburg during the pre-kindergarten round-ups or screenings in April and May. Eleven children from pre-schools and day-care centers in LaCrosse were given the test in June and July. These 39 children comprised the research population. They were not chosen randomly. Instead, they were chosen on availability, age, and locale.

Each child was individually administered the Peabody Picture Vocabulary Test (PPVT). This took approximately ten minutes. Each small group of two to four students also were given the newly designed research instrument. This instrument had a total of 83 items. The time involved for the second test was fifteen to twenty minutes. The

researcher used a tape recorder as an aid in scoring the research instrument.

The researcher had obtained two raw scores for each child, (see appendix H), one from the PPVT and the other from the research instrument. The median score for each was calculated. The median score of the research instrument was 60.5. The median of the PPVT was 54.3. The mean for each was also calculated. The mean of the research instrument was 58.67. The mean of the PPVT was 53.51.

The median scores and the mean scores for the two instruments differed only five and six points. The closeness of the scores suggests that the research instrument is an appropriate measure of experiential background.

The researcher had felt that children having had many rich experiences would be able to identify 95 percent of the pictures. It was also felt that children having limited experiences would not be able to identify any more than 50 percent of them. The range of scores was 28 (33 percent) to 76 (90 percent). No child was able to identify 79 pictures (95 percent). Two children were unable to identify 42 pictures (50 percent).

This information did not indicate a rich educational background, or a lack of rich educational background. Rather, it indicated an average amount of experience. No one in the research field has explored experiential background to the extent that he can say: average experiential background equals "x" percent.

Certain test items gave additional information to the classroom

teacher of beginning reading. Very few children could identify the 'canoe', 'barge' and 'dam' in those terms. The terms children used were 'boats' and 'waterfall'. Macaroni was often called noodles. No one identified item 43 as jet. It was either plane or airplane. Semi and truck were found to be interchangable words (item 44). Colors and crayons (item 28) were also interchangable words. Less than ten percent identified item 67 as nurse. It was called doctor. Only nine percent of the children understand the concept of town and city. Other unfamiliar items were medicine, make-up, lamb, silo, baler, camper, dam, raccoons, radishes, reel, movers, dentist, barber, factory, chemist, town and city. The researcher decided to find better pictures for these items.

The researcher found that the data gained by recording the childrens' responses other than the listed vocabulary was helpful in evaluating the research instrument. This instrument was not found to be as clear and decisive as the author intended. However, it seemed to this writer that the children enjoyed the colorful pictures of her research instrument more than the line drawings of the PPVT.

CHAPTER FOUR

Conclusion

"Do you have to read to be smart?" Ken Goodman stated:

> You don't have to be smart to learn language ... You don't have to be smart to read. I think we have to ask ourselves seriously why if children learn to talk without our help, they don't learn to read with our help? ...
>
> We failed to see reading as a process that is continually trying to get to the meaning: trying to make sense out of the experience one is having with written language (Goodman, 1975).

Teachers want to be able to teach their students to learn well, especially to be able to read. We should teach them to be smart since language and learning are interrelated. An axiom to follow would be: no language without experience and no experience without language.

It was the purpose of this study: (1) to examine reading readiness as it relates to a child's experiential background; (2) to review the literature concerning the readiness factors that influence a child's learning to read, and to review several picture instruments of the pre-reading level; (3) to develop and administer an instrument to test the experiential background of the pre-reader; and (4) to report the findings and implications and give recommendations for future study.

Reading readiness was found to be that wealth of information necessary for the learner to attach meaning to spoken and written symbols. A child gains such information through many direct concrete experiences with situations in his environment.

Reading readiness was also found to be a part of the child's natural development. It relates to the aspects of mental, physical, social, and emotional development. The child's language development was found to be inseparable from his total development and environment (Durkin, 1970). A young child does not even learn a word without concrete experience with the concept.

Teachers want to be sure of themselves. They want to be able to measure each child's reading skills. This researcher examined several reading readiness tests. The five major tests measured twelve readiness skills. However not one of them attempted to measure experiential background.

Clarice Widell (1971) researched the effect of pictures on children who are learning to read. It was found that children react favorably to the multi-sensory stimulation of pictures and words. Widell urged the use of attractive pictures. For this reason the researcher reviewed three instruments.

The Science Research Associates Test in Reading, (1954), presented hard and challenging vocabulary for average and above-average readers. Other SRA material from the Learning to Think Series contained complex line drawings. The child must decipher pictures and complete many cognitive thinking exercises.

The Peabody Picture Vocabulary Test was developed to give an estimate of the subject's verbal intelligence through measuring his hearing vocabulary. Line drawings were again used to present vocabulary.

The Pre-Reading Skills Program made use of colored line drawings to test and teach five visual and auditory skills. The drawings were appealing but needed identification before independent use by the reader.

These three instruments were all designed for purposes other than the experiential background of the child.

This researcher had found very few good picture instruments. It therefore became the purpose of the present study to construct a good picture instrument (see Appendix A and B). Eighty-three pictures were found for twelve categories of experience. The pictures were all of objects which began with simple initial consonant sounds.

This researcher mounted the pictures on cardboard and constructed a response sheet. The test (see Appendix G) was field tested and than shown to the research population of thirty-nine readers.

Findings

The research instrument and the PPVT were each given to thirty-nine subjects. The raw scores for each were tabulated and compared (see Appendix H). These findings were as follows:

1. This researcher found that the median and mean score for the two instruments were only five and six scores different. The median score for the research instrument was 60.5. The median score for the PPVT was 54.3. The mean of the research instrument was 58.67. The mean of the PPVT was 53.51.

2. Several items were identified very infrequently by the research population. Medicine, make-up, lamb, silo, baler, camper, dam, raccoons, radishes, reel, movers, dentist, barber, factory, chemist, and town and city were found to be items not common to the experience of the research population.

3. Several items had common alternate responses. For example, macaroni or noodles, colors or crayons, semi or truck, police car or cop car, lions or tigers and tigers or lions were the responses recorded.

Implications

This researcher found the results of the research instrument helpful in analyzing the effectiveness of the instrument as follows:

1. The closeness of the median and mean scores indicated that the tests were similar measures of oral language, vocabulary and experiential background. The research instrument was found to be an appropriate test.

2. The items identified infrequently by the research population were unclear concepts as they were presented in the research pictures. These pictures were carefully examined and considered. Other pictures should be found for these responses.

3. The classroom teacher of beginning readers should be aware that some words do not present the same concept to the children as they do to the teacher. When one speaks of a semi, the child may be wondering if a semi is the same thing as the truck that he knows.

4. The classroom teacher could use this research instrument as a teaching device in the room after the initial use as a screening agent. The community workers subsection would be very useful in a social studies unit. Other sections could also be used as visual aids in social studies units. The entire set of pictures could be used for the initial consonant sounds in the phonics class.

Recommendations

This researcher learned many things about constructing tests. If there is no good picture test in a subject field, the answer may be that it is hard to construct a good instrument. There is still a great need for more good picture material on the readiness level. Colorful photographs should be explored for use instead of plain line drawings.

This research instrument should be revised for internal clarity and be presented to a larger research population.

The response sheet should be used with a tape recorder so that the examiner could use all the data of oral language given by the children.

Future research should be explored in the area of the difference between active and passive experiences of young children. For example, would children who only view images on television learn as well as the children who actively examine real or concrete objects.

A follow-up study should be made on the thirty-nine subjects of the research population during the next two years. The researcher would want to give a kindergarten reading readiness test to the research population in the spring of 1979. A reading achievement test would be given in the spring of 1980. The researcher would examine the scores to see if there would be any correlation between the range of experiential background and the children's measured reading success.

References

Barbe, Walter B. Educator's guide to personalized reading instruction. Englewood Cliffs, N. J.: Prentice-Hall, 1961.

Berkowitz, Gloria D., & Farley, Frank H. Reading readiness and early linguistic skills as a function of individual differences in the orienting response. Madison, Wis,: Wisconsin University, 1971. (ERIC Document Reproduction Service No. ED 070 060)

Betts, Emmett A. Foundations of reading instruction (3rd ed.). New York: American Book, 1957. (1st ed.,1932).

Buros, O. K. Reading tests and reviews. New York: Gryphon Press, 1968.

Buros, O. K. The seventh mental measurements yearbook. New York: Gryphon Press, 1975.

Butler, Annie L. (Ed.). Current research in early childhood education. Washington, D. C.: American Association of Elementary-Kindergarten-Nursery Educators, 1970.

Cazden, Courtney B. How knowledge about language helps the classroom teacher - or does it: a personal account. The Urban Review, 1976, 8, 74-90.

Cushenbery, Donald C. Reading improvement in the elementary school. New York: Parker Publishing, 1969.

Dechant, Emerald. Diagnosis and remediation of reading disability. New York: Parker Publishing, 1968.

Diederick, Paul B. Relationships among experience, language, and reading. In William S. Gray (Ed.), Reading in relation to experience and language (Vol.6). New York: Conference on Reading, 1944.

Dunn, Lloyd M. Manual for the Peabody Picture Vocabulary Test. Minnesota: American Guidance Service, Inc., 1959.

Dunn, Lloyd M. Exceptional children in the schools. New York: Holt, Rinehart, Winston, 1973.

Durkin, Dolores. Children who read early. New York: Teacher's College Press, 1966.

Durkin, Dolores. Teaching them to read. Boston: Allyn and Bacon, 1970.

Gates, Arthur I. The improvement of reading. New York: Macmillan, 1947.

Goodman, Kenneth S. Do you have to be smart to read? Do you have to read to be smart? The Reading Teacher, 1975, 28, 625-632.

Heilman, Arthur W. Principles and practices of teaching reading. Columbus, Ohio: Charles E. Merrill Books, 1961.

Henderson, Edmund H., & Long, Barbara H. Correlations in reading readiness among children of varying background. The Reading Teacher, 1968, 22 (1), 40-44.

Hildreth, Gertrude. Readiness for school beginners. New York: World Book, 1950.

Hildreth, Gertrude. Teaching Reading. New York: Henry Holt, 1958.

Huey, Edmund Burke. The psychology and pedagogy of reading. New York: Macmillan, 1908.

Kamm, Margaret. The 1971-72 field test of the prereading skills program. Madison, Wis.: Wisconsin University, 1973. (ERIC Document Reproduction Service No. ED 092 906)

Larrick, Nancy. From "Hands Off" to "Parents We Need You!" Childhood Education, 1976, 52, 134-137.

Miller, Wilma H. Certain Home environmental factors and children's reading readiness. Normal, Ill.: Illinois State University, 1970. (ERIC Document Reproduction Service No. ED 041 711)

Miller, Wilma H. Identifying and correcting reading difficulties in children. New York: Center for Applied Research in Education, 1971.

Nevius, John R. Teaching for logical thinking is a prereading activity. Lubbock, Texas: Texas Tech University, 1976. (ERIC Document Reproduction Service No. ED 127 557)

Nodine, Calvin F., & Hardt, James V. Role of letter-position cues in learning to read words. Journal of Educational Psychology, 1970, 61 (1), 10-15.

Porter, Para. Pictures in reading. The Reading Teacher, 1968, 22 (3), 238-241.

Rude, Robert. Readiness tests: implications for early childhood education. The Reading Teacher, 1973, 26, 572-577.

Russell, David H. Children learn to read. Boston: Ginn and Co., 1961.

Samuels, S. Jay. Effects of pictures on learning to read, comprehension, and attitudes. Review of Educational Research, 1970, 40, 397-407.

Scott, Ralph. Perceptual readiness as a predictor of success in reading. The Reading Teacher, 1968, 22 (1), 36-39.

Simula, Vernon L. (Ed.). Tests of reading readiness and achievement. Newark, Delaware: International Reading Association, 1969.

Spache, George D. Investigating the issues of reading disabilities. Boston: Allyn and Bacon, 1976.

Strang, Ruth. Helping your child improve his reading. New York: E. P. Dutton & Co., 1962.

Thorpe, Louis P. Child psychology and development. New York: Ronald Press Co., 1962.

Thurstone, Thelma Gwinn. Learning to think series. Chicago: Science Research Associates, Inc., 1967.

Todd, Vivian E., & Hefferman, Helen. The years before school. New York: Macmillan, 1964.

Venezky, Richard L. Manual for the pre-reading skills program. Chicago: Encyclopedia Britannica Educational Corp., 1974.

Venezky, Richard L. Prereading skills; Theoretical foundations and practical applications. Madison, Wis.: Wisconsin University, 1975. (ERIC Document Reproduction Service No. ED 109 663)

Venezky, Richard L. & Chapman, Robin S. An instructional program in pre-reading skills: needs and specifications. Madison, Wis.: Wisconsin University, 1970. (ERIC Document Reproduction Service No. ED 070 061)

Widell, Clarice C. A survey of educator's opinions concerning the effect of pictures on children who are learning to read. Unpublished manuscript, University of Wisconsin - LaCrosse, 1973.

APPENDIX A

Initial List of Pictures

Household

wall

door

window

ceiling

picture

dusting

vacuum cleaner

washer-dryer

freezer

dishwasher

Furnishings

lamp

couch-davenport-sofa

table

chairs

carpet-rug

Modes of Travel Vehicles

airplane/jet

truck/van

car

bus

train

fly

ride

semi

Police

car

jail

policeman (cop)

nightstick

gun (holster)

Siblings

toys

playpen

crib

rattle

baby bottle

pacifier

Communication

telephone

radio

T V

stereo

8-track player

Farm Animals

cow

horse

pig

lambs

rooster

Pets

cat (kitty)

dog (doggy, puppy)

snake

gerbil

hamster

mice

Playthings-Playmates

friend

boy

girl

toys

teddy bear

trucks-cars

dolls

games

puzzles

Farm-Dairy

silo

combine

windmill

Culture

butler

maid

etiquette

Zoo-Circus Animals

zebra
lion
tiger
monkey
bear
giraffe
camel

Factory & Industry

assembly line
manufacture
machines

Grocery Store
Supermarket

grocery cart
cans
check out
aisles
displays
shelves

School

gym
classroom
furnace
principal
teacher

Woods

stream, creek, brook
mouse
moss
violets
rabbit
squirrel
deer
skunk
sun, moon, stars
clouds
chipmunk

Literature

story telling
storybook
books
castle
armor
dragon
Winnie the Pooh
Donald Duck
Mother Goose

City

minibus
terminal (railroad, bus)
cab, taxi

Geography

globe
world
cactus
desert
mountain
oil well
derrick

Sports

baseball
run/base
hockey
football
goal
ski
wrestling
basketball
bat

Cooking

bowl
scraper
spatula
measuring spoons
egg beater
mixer
mix

Post Office

- mail
- stamp
- cancel
- postman
- letters
- postcards
- packages
- airmail
- sort

Fire Station

- hose
- hatchet
- fireman
- alarm
- siren
- ladder

Literacy

- magazines
- newspaper
- dictionary
- mail-letter
- encyclopedia
- books
- records
- tape recorder

Family and Home

- father
- mother
- brother
- sister

Community Helpers

- teacher-aide
- policeman
- librarian
- fireman
- storekeeper

Professions-Vocations

- doctor
- dentist
- nurse

Fishing

- boat
- pole (rod & reel)
- worm
- fly
- cork-bobber
- hook
- fish
- frog
- crab

Tools

- pliers
- screwdriver
- wrench
- hammer
- saw
- ax
- ladder

Picnics-Cookouts

- basket
- thermos
- salad
- charcoal grill
- hamburger
- hot dog
- barbecue

Department Store

- clerk
- escalator
- elevator

Park or Garden

- plants
- trees
- bush
- flower
- grass

Farm-Dairy

- tractor
- barn
- farmer
- calves
- parlor milking
- bunkfeeder

Travel

- maps
- rest area
- ramp
- exit
- interstate
- freeway
- motel
- Amtrak
- bus (Greyhound Trailways)
- airplane/jet

Beach-Riverside-Lake

- sand
- waves
- shells
- drift wood
- seaweed
- lake

Concert

- conductor
- music
- soloist
- harp
- violin
- trombone
- trumpet
- tuba
- flute
- clarinet
- piano
- saxophone

Parade

- float
- band
- clown

APPENDIX B

Working List of Pictures

Household

wall

door

picture

window

dusting

Furnishings

lamp

table

Police

car

jail

policeman

gun

Siblings

toys

rattle

baby bottle

pacifier

Communications

radio

telephone

television

Factory-Industry

manufacture

machines

Playthings-Playmates

boy

girl

toys

teddybear

cars

dolls

games

puzzles

Pets

cat

dog

hamster

mice

Modes of Travel Vehicles

van

car

bus

ride

semi

Grocery Store Supermarket

cans

cart

displays

Zoo-Circus Animals

zebra

lion

tiger

monkey

bear

camel

Farm-Dairy

silo

combine

windmill

baler

milking

barn

farmer

Farm Animals

cow

horse

pig

lambs

calf

rooster

School

furnace

teacher

desk

Fire Station

hose

hatchet

fireman

siren

ladder

City

minibus

bus

Community Helpers

policeman

librarian

fireman

Profession-Vocations

doctor

dentist

nurse

Tools

hammer

saw

ladder

Picnics-Cookouts

basket

salad

hamburger

hot dog

barbecue

Post Office

mail

cancel

postman

letters

postcards

packages

sort

Sports

baseball

hockey

football

goal

basketball

ball

bat

Woods

mouse

moss

violets

rabbit

deer

Family and Home

father

mother

sister

Beach-Riverside-Lake

sand

waves

lake

Cooking

bowl

mixer

Fishing

boat

pole

worm

hook

fish

reel

Park-Garden

bush

Travel

maps

motel

Literacy

magazines

newspaper

dictionary

mail-letter

books

records

APPENDIX C

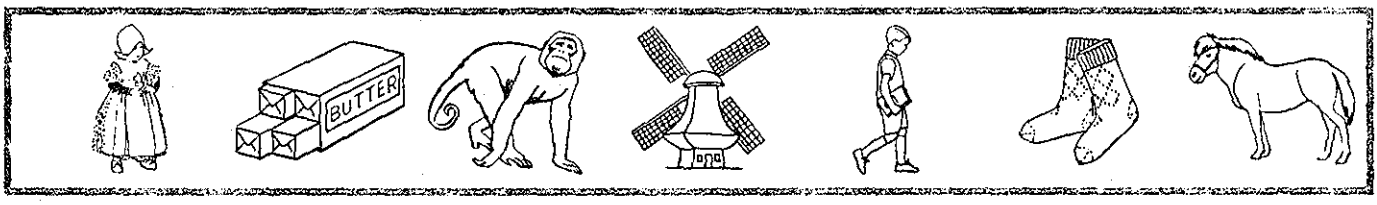
Samples From

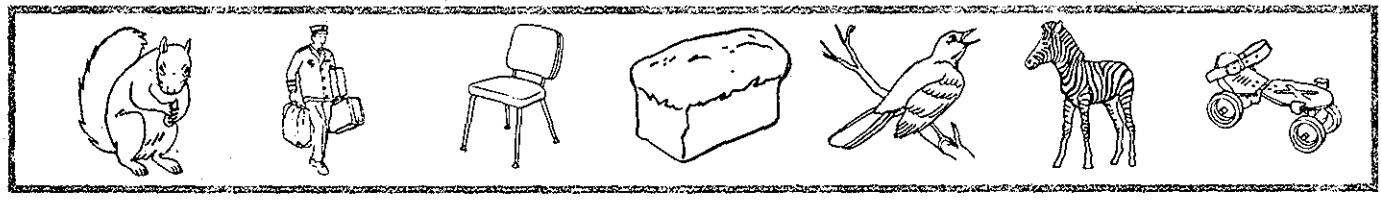
Science Research Associates

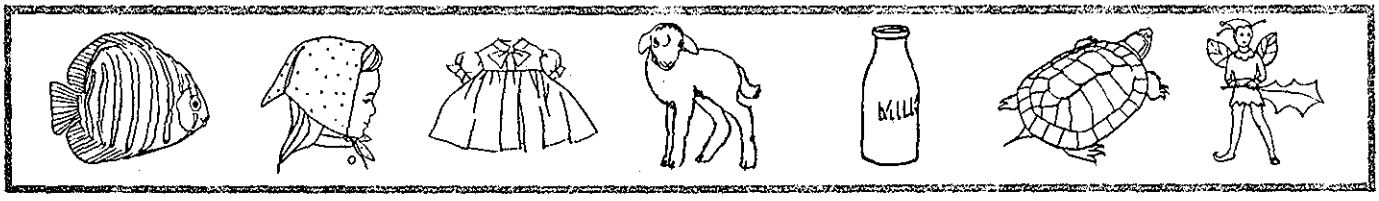
Learning To Think Series

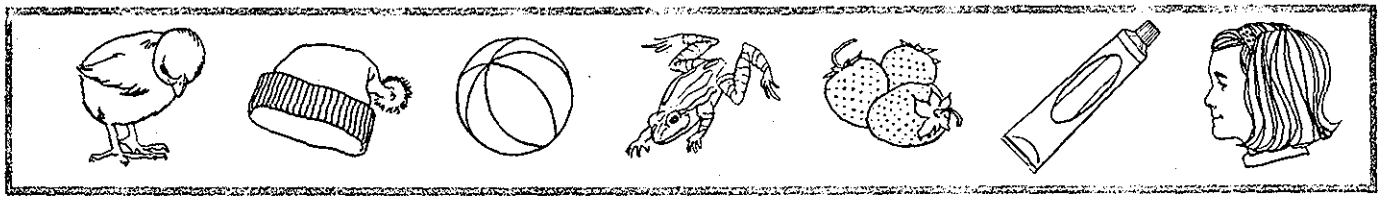
18

In each row, mark the following pictures. 1. The baby buggy, the man, and the car. 2. The boy, the books, and the dog. 3. The duck, the sweater, and the rabbit. 4. The butter, the monkey, the socks, and the pony. 5. The squirrel, the chair, the bird, and the skate. 6. The fish, the dress, the lamb, and the milk. 7. The truck, the glove, the king, and the castle. 8. The ball, the frog, the berries, and the girl.





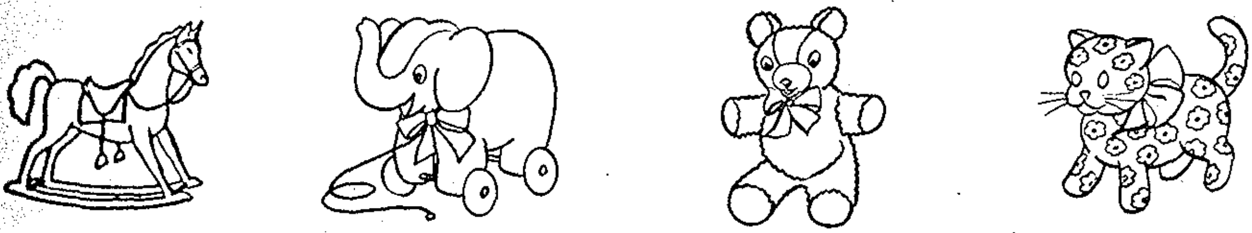


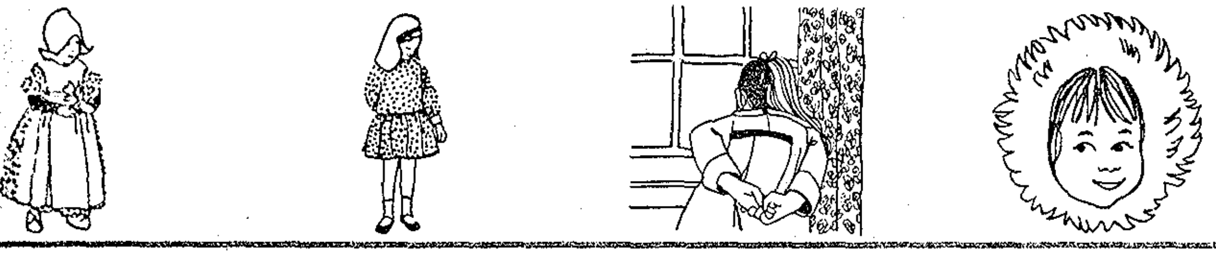


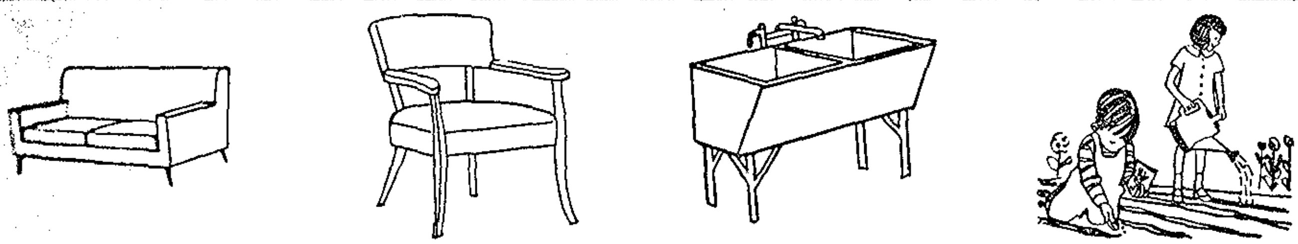
Mark the following pictures. 1. The toy animal that moves on wheels. 2. The girl who lives where it is very cold. 3. The seat that is wide enough for two persons. 4. The man who is carrying something on his back. 5. The one that hangs in the window at Christmas-time. 6. The basket with several kinds of fruit.

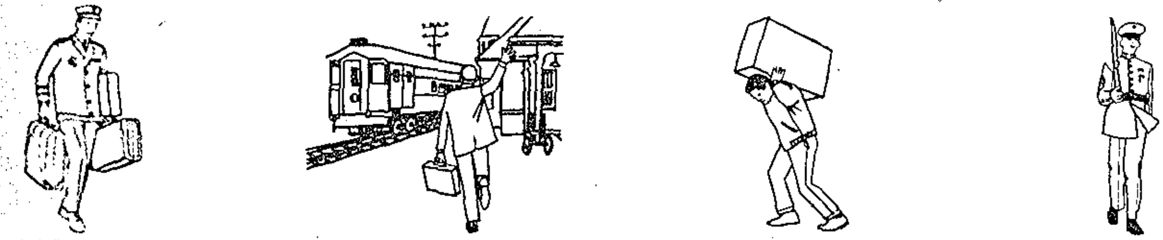
55

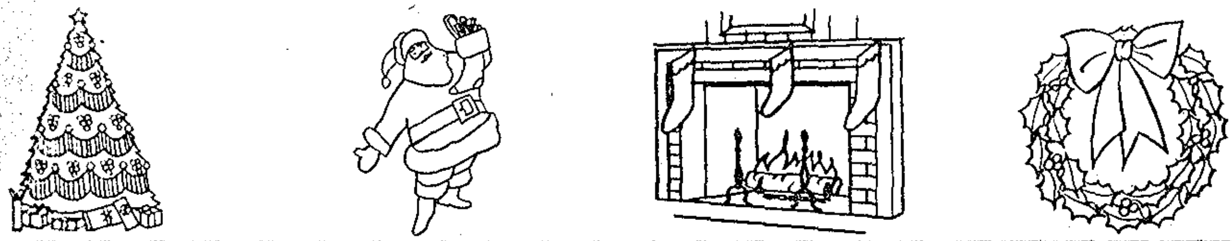
25

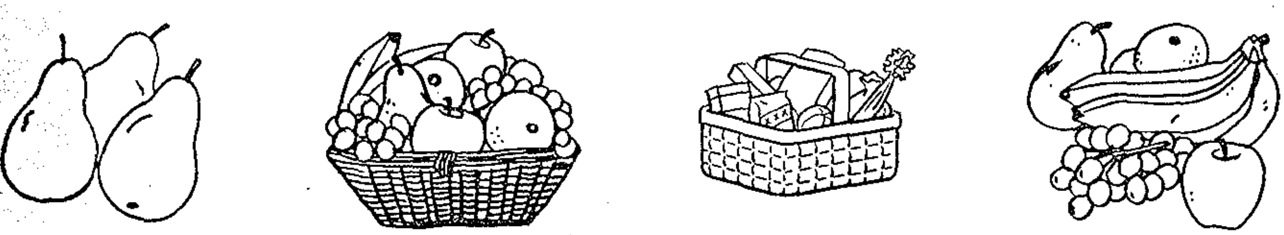




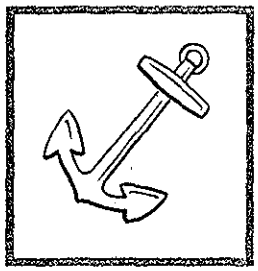


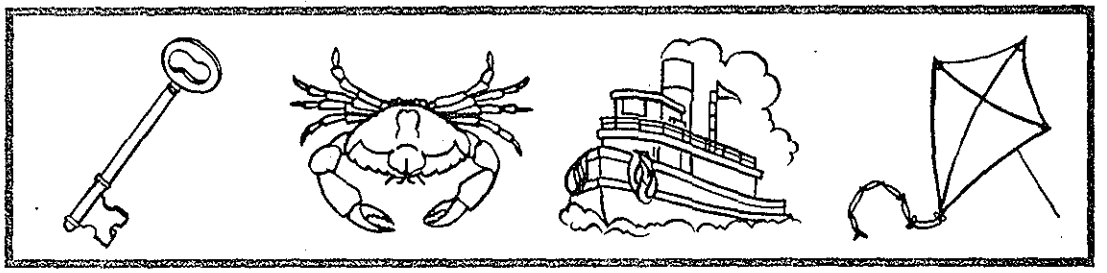


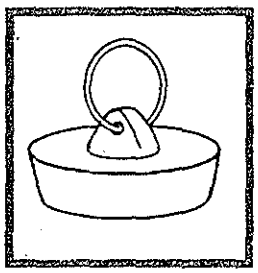


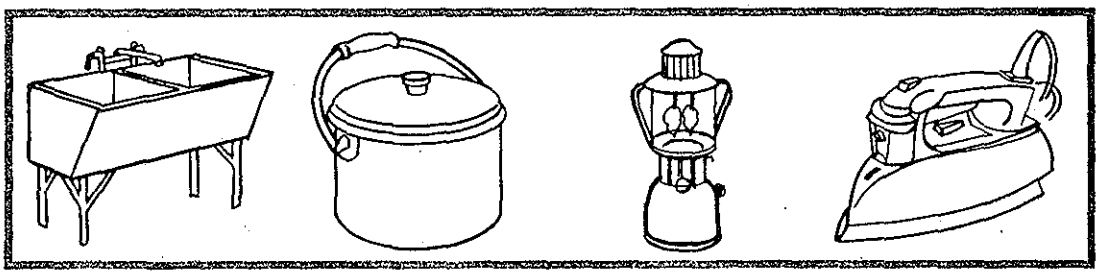


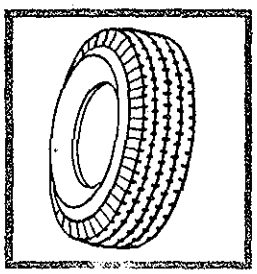
What is the anchor a part of? Mark it. What is the stopper a part of? Mark it. What is the tire a part of? Mark it. What is the yarn a part of? Mark it. What is the bead a part of? Mark it. What is the propeller a part of? Mark it.

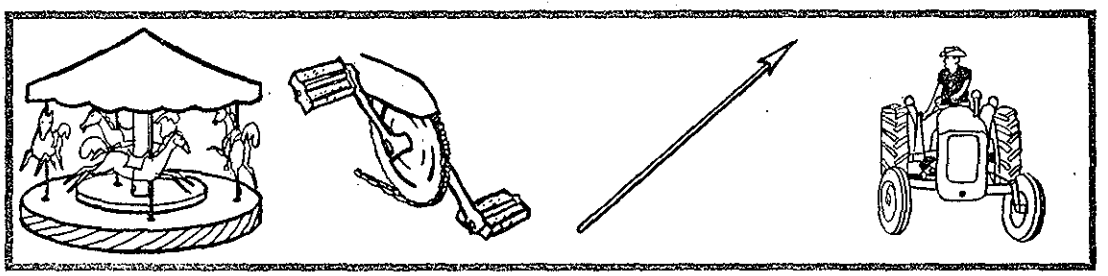


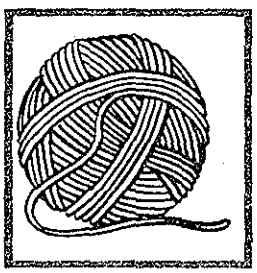


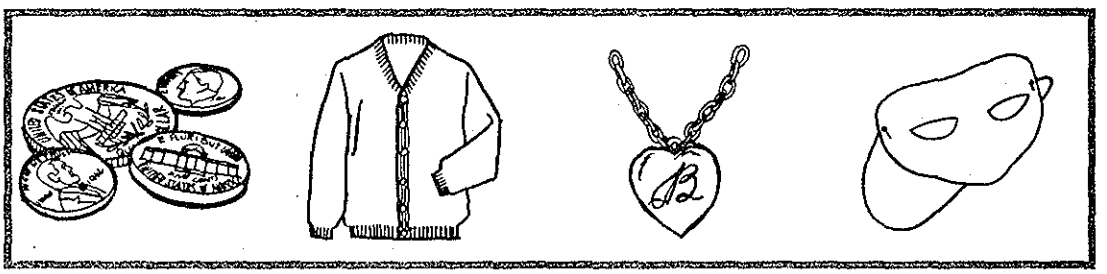


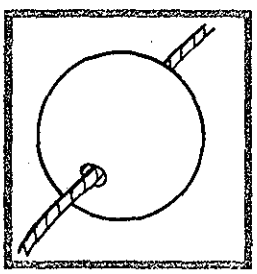


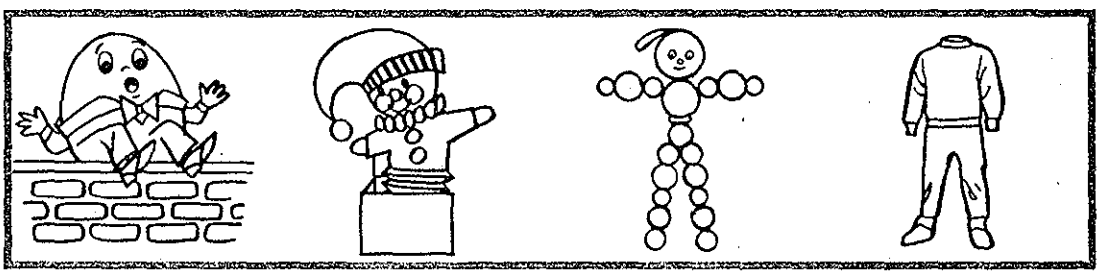


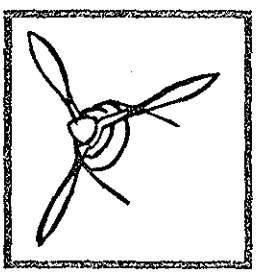


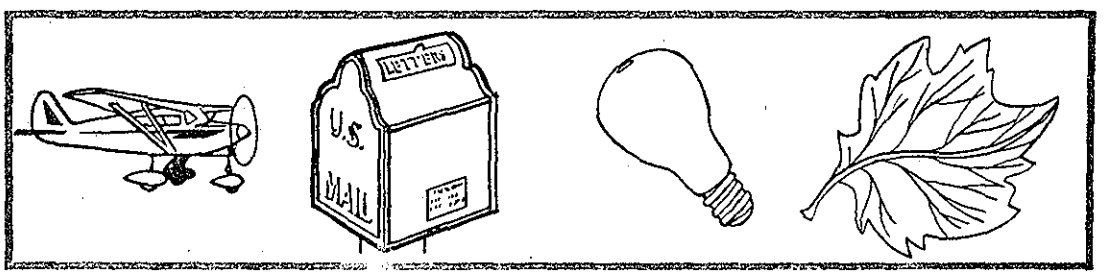








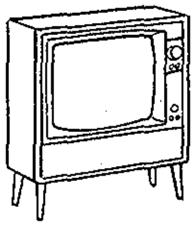
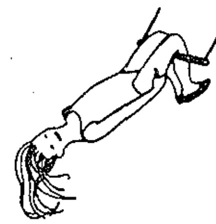


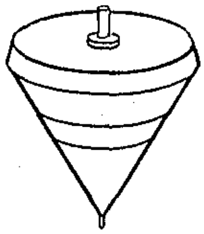
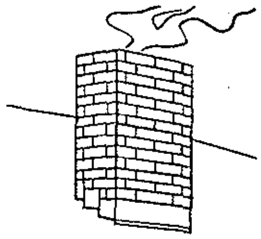
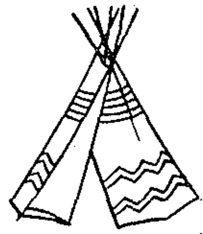


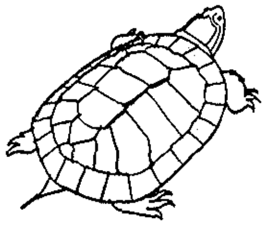
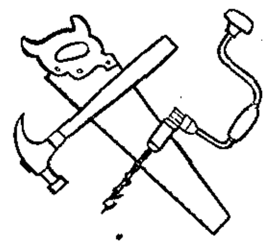
3-6951

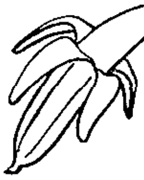
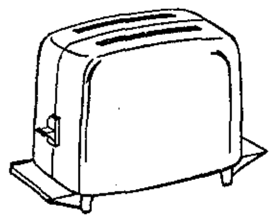
84

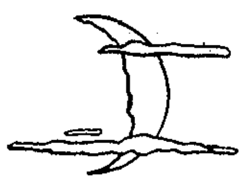
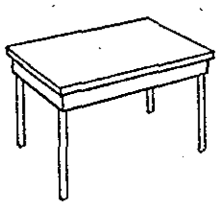
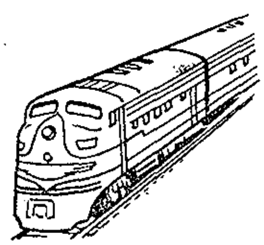
Mark the picture of each object with a name that begins with a sound associated with the letter t. 1. Basket, tie, television, girl, trapeze. 2. Top, cook, chimney, tent, baby. 3. Cap, turtle, candle, woman, tools. 4. Turkey, banana, toaster, tomatoes, Indian. 5. Snowman, moon, table, newsboy, train. 6. Truck, tool, twins, book, toy.

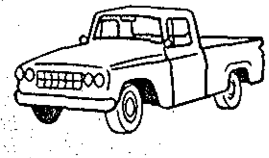
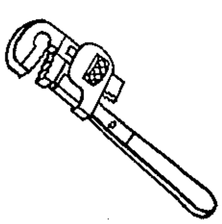
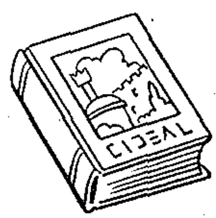
    

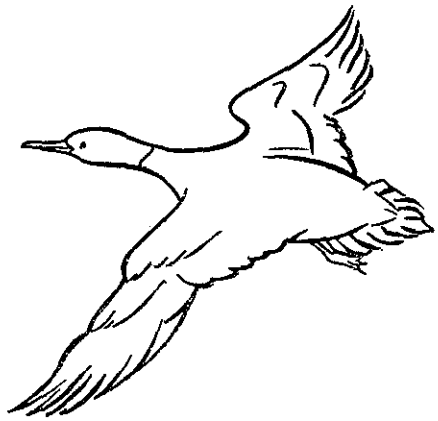
    

APPENDIX D

Samples From

Peabody Picture Vocabulary Test



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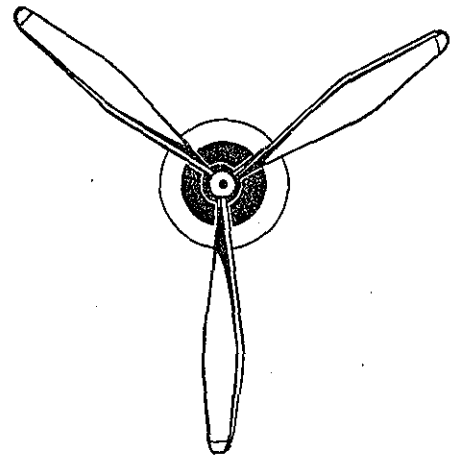

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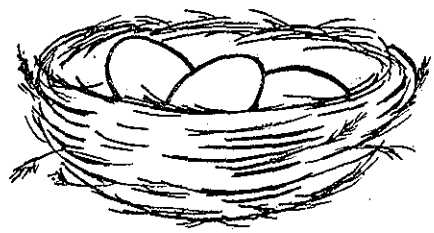

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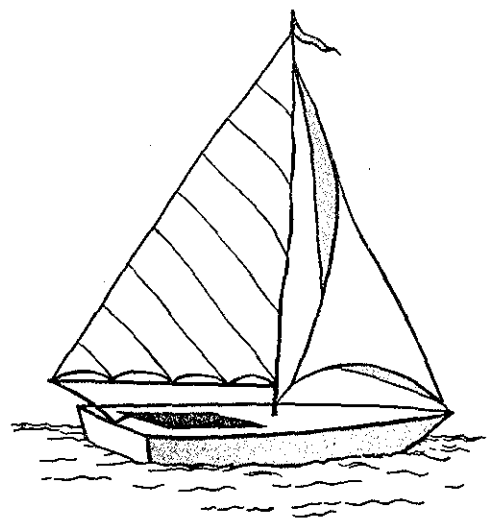

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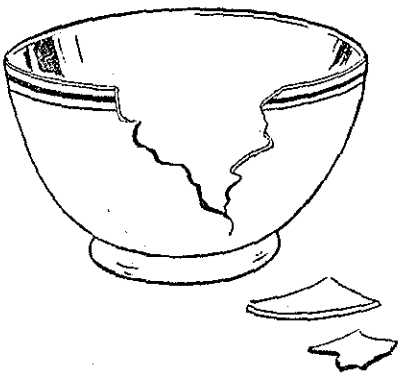

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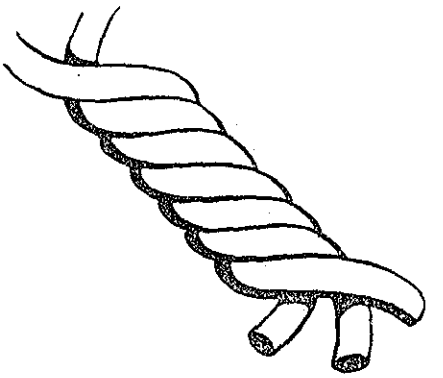

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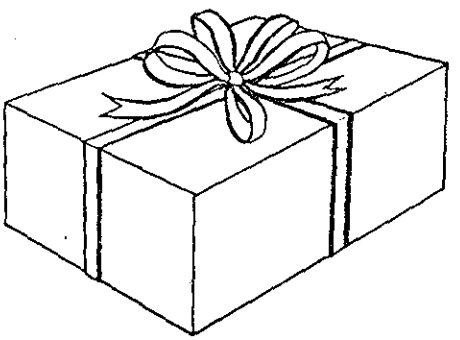

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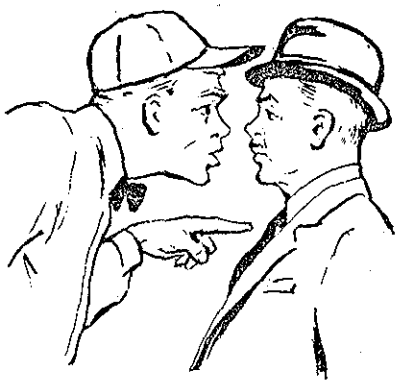

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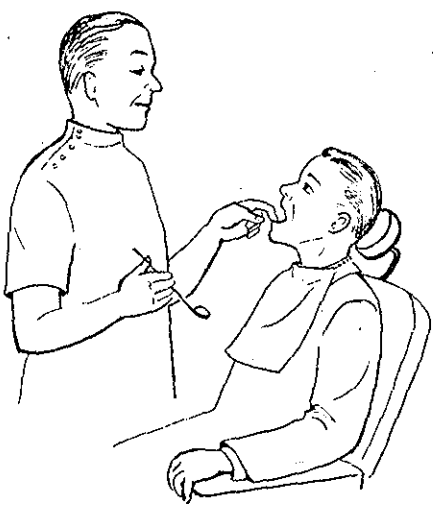

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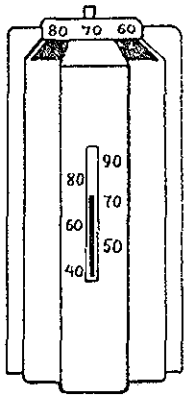

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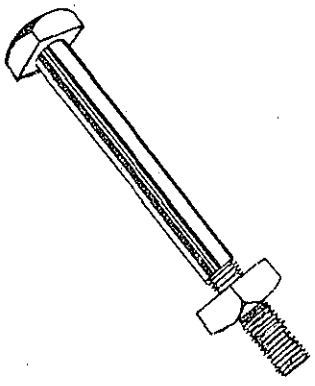

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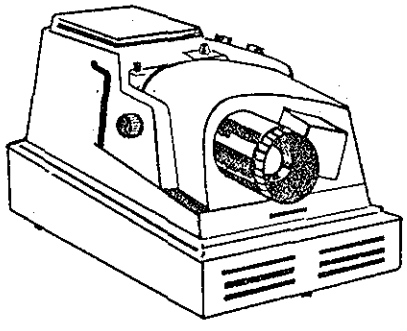

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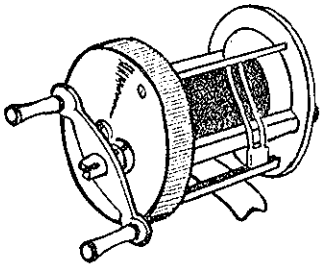


4

Peabody Picture Vocabulary Test

by Lloyd M. Dunn, Ph.D.

FORM b

INDIVIDUAL TEST RECORD

NAME _____ SEX: M F GRADE _____
(last) (first) (initial) (circle) (or phone)

SCHOOL _____ TEACHER _____
(or agency or address) (or counselor or supervisor)

EXAMINER _____ TIME _____ CODE _____
(min.) (or race or descent)

AGE DATA

Date of testing _____ _____ _____
(year) (month) (day)

Date of birth _____ _____ _____
(year) (month) (day)

Age _____ _____
(years) (months)

TEST SCORES

Raw score (from page 3) _____

Intelligence quotient (I.Q.) _____

Percentile score (%ile) _____

Mental age (M.A.) _____

CONVERSION OF MONTHS TO NUMERALS FOR USE IN RECORDING AGE DATA

Month	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
No. of Month:	1	2	3	4	5	6	7	8	9	10	11	12

OTHER TEST DATA

Names of tests	Date	CA	Score	Type of score
PPVT, Form A				

LANGUAGE BACKGROUND

Language of the home: _____
(if other than standard English)

Quality of language:	☐ good for age	☐ fair for age	☐ poor for age
Quantity of speech:	☐ talkative	☐ average	☐ taciturn
Intelligibility of speech:	☐ good	☐ fair	☐ poor

REASON FOR TESTING _____

AGS

Published by
AMERICAN GUIDANCE SERVICE, INC.
Publishers' Building, Circle Pines, Minnesota 55014

SCORE SHEET FORM

b

Suggested Starting Points (see manual page 8)

Age Category	Begin with:	Age Category	Begin with:
below 3-3	Plate No. 1	9-6 to 11-5	Plate No. 60
3-3 to 4-2	Plate No. 15	11-6 to 13-5	Plate No. 70
4-3 to 5-5	Plate No. 25	13-6 to 15-5	Plate No. 80
5-6 to 7-5	Plate No. 40	15-6 to 17-5	Plate No. 90
7-6 to 9-5	Plate No. 50	above 17-6	Plate No. 100

BASAL: 8 consecutive correct responses

CEILING: 6 errors in 8 consecutive responses

*TO RECORD ERRORS: Make oblique strokes through the geometric figures. Every eighth figure is i

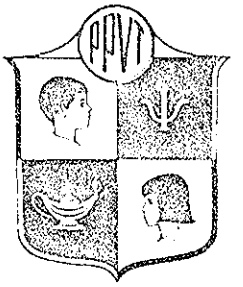
Plate No.	Word	Key Resp.	Errors*
1	table	(2)	
2	bus	(4)	
3	horse	(2)	
4	dog	(3)	
5	shoe	(4)	
6	finger	(4)	
7	boat	(3)	
8	children	(2)	
9	bell	(1)	
10	turtle	(4)	
11	climbing	(2)	
12	lamp	(1)	
13	sitting	(3)	
14	jacket	(2)	
15	pulling	(1)	
16	ring	(2)	
17	nail	(1)	
18	hitting	(2)	
19	tire	(3)	
20	ladder	(3)	
21	snake	(1)	
22	river	(1)	
23	ringing	(4)	
24	baking	(4)	
25	cone	(2)	
26	engineer	(3)	
27	peeking	(4)	
28	kite	(1)	
29	rat	(1)	
30	time	(1)	
31	sail	(4)	
32	ambulance	(2)	
33	trunk	(2)	
34	skiing	(4)	
35	hook	(2)	
36	tweezers	(1)	
37	wasp	(3)	
38	barber	(2)	
39	parachute	(3)	
40	saddle	(4)	
41	temperature	(3)	
42	captain	(1)	
43	whale	(2)	
44	cash	(4)	
45	balancing	(1)	
46	cobweb	(3)	
47	pledging	(3)	
48	argument	(1)	
49	hydrant	(3)	
50	binocular	(4)	
51	locomotive	(1)	
52	hive	(2)	
53	reel	(4)	
54	insect	(1)	
55	gnawing	(1)	
56	weapon	(2)	
57	bannister	(3)	
58	idol	(1)	
59	globe	(1)	
60	walrus	(3)	
61	filing	(1)	
62	shears	(3)	
63	horror	(1)	
64	chef	(4)	
65	harvesting	(4)	
66	construction	(3)	
67	observatory	(4)	
68	assistance	(4)	
69	erecting	(2)	
70	thoroughbred	(3)	
71	casserole	(2)	
72	ornament	(4)	
73	cobbler	(3)	
74	autumn	(2)	
75	dissatisfaction	(3)	

RAW SCORE CALCULATIONS

Ceiling item . . . . . _____

Less errors . . . . . _____

Raw score . . . . . _____



entical to facilitate the determination of the basal or ceiling.

Plate No.	Word	Key Resp. Errors*		Plate No.	Word	Key Resp. Errors*		Plate No.	Word	Key Resp. Errors*	
76	scholar	(4)	☆	101	incandescent	(4)	△	126	edifice	(4)	◇
77	oasis	(1)	◇	102	cornucopia	(3)	✣	127	scallion	(3)	○
78	soldering	(3)	○	103	ascending	(2)	♡	128	infirm	(1)	□
79	astonishment	(3)	□	104	summit	(1)	☆	129	emaciate	(1)	△
80	tread	(1)	△	105	caster	(3)	◇	130	catapult	(2)	✣
81	thatched	(2)	✣	106	lobe	(2)	○	131	arable	(2)	♡
82	jurisprudence	(1)	♡	107	patriarch	(3)	□	132	orifice	(4)	☆
83	sapling	(2)	☆	108	sampler	(3)	△	133	renovate	(3)	◇
84	arch	(3)	◇	109	ingenious	(3)	✣	134	precarious	(1)	○
85	dwelling	(4)	○	110	repose	(1)	♡	135	dromedary	(2)	□
86	lubricating	(1)	□	111	constrain	(3)	☆	136	pedagogue	(1)	△
87	pedestrian	(2)	△	112	tangent	(1)	◇	137	sepal	(1)	✣
88	vale	(3)	✣	113	sconce	(4)	○	138	lethargic	(3)	♡
89	jubilant	(3)	♡	114	hoary	(4)	□	139	delectation	(4)	☆
90	laden	(2)	☆	115	pendant	(1)	△	140	embellish	(3)	◇
91	pursuit	(2)	◇	116	prodigy	(1)	✣	141	osculation	(1)	○
92	goblet	(4)	○	117	casement	(2)	♡	142	cincture	(2)	□
93	rodent	(2)	□	118	quiescent	(1)	☆	143	barrister	(3)	△
94	confiding	(3)	△	119	talon	(4)	◇	144	carrion	(3)	✣
95	reclining	(4)	✣	120	chevron	(1)	○	145	lanate	(2)	♡
96	frisking	(1)	♡	121	feline	(4)	□	146	chirography	(4)	☆
97	moat	(2)	☆	122	cairn	(2)	△	147	mendicant	(1)	◇
98	salutation	(3)	◇	123	convergence	(4)	✣	148	saltation	(1)	○
99	barrier	(2)	○	124	apothecary	(3)	♡	149	florescence	(2)	□
100	foal	(3)	□	125	indigent	(2)	☆	150	culver	(4)	△

TEST BEHAVIOR

Examples needed:	☐ only 1	☐ 2 or 3	☐ over 3
Types of response:	☐ S. called numbers	☐ Subject pointed	☐ Examiner pointed
Rapport:	☐ easily attained	☐ slowly attained	☐ poor rapport
Guessing:	☐ guessed when asked	☐ resisted guessing	☐ prone to guess
Speed of response:	☐ fast	☐ average	☐ slow
Attention span:	☐ very attentive	☐ average	☐ distractible
Perseveration:	☐ none noted	☐ some	☐ frequent
Need for praise:	☐ little needed	☐ some needed	☐ much needed
Shyness:	☐ friendly	☐ slightly shy	☐ very shy
*Effort:	☐ good effort	☐ fair effort	☐ perfunctory effort

PHYSICAL CHARACTERISTICS

Hearing: need to repeat stimulus words	☐ never	☐ seldom	☐ often
apparent hearing acuity	☐ good	☐ fair	☐ poor
hearing aid	☐ S. did not own one	☐ S. owned but did not wear one	☐ S. wore one
Vision: distance of eyes from page	☐ under 8"	☐ average (8" - 20")	☐ over 20"
apparent visual acuity	☐ good	☐ fair	☐ poor
glasses	☐ S. did not own glasses	☐ S. owned but did not wear glasses	☐ S. wore glasses
Motor activity:	☐ hyperactive	☐ average	☐ hypoactive
Sedation:	☐ none	☐ slight	☐ heavy

RECOMMENDATIONS

PERFORMANCE EVALUATION

***Do you believe that the test performance of the subject has fairly represented his or her ability? ☐ Yes ☐ No. If not, why?**

Examiner's signature

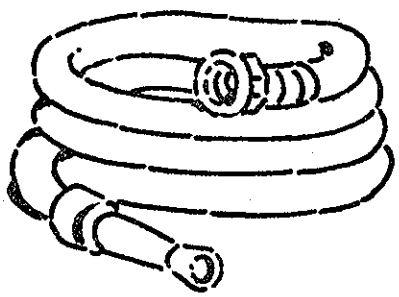
Litho in U.S.A.

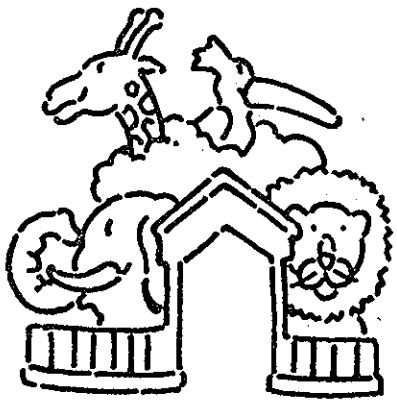
APPENDIX E

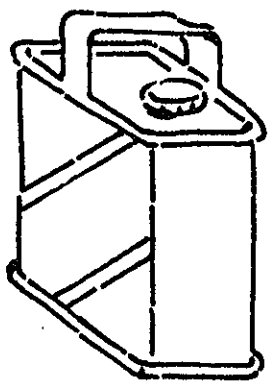
Samples From

Pre-Reading Skills Program

Z







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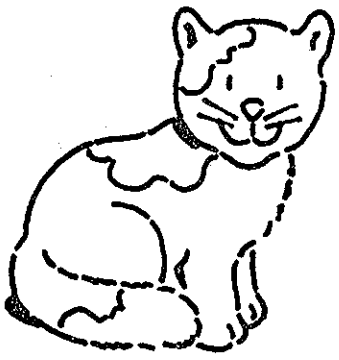

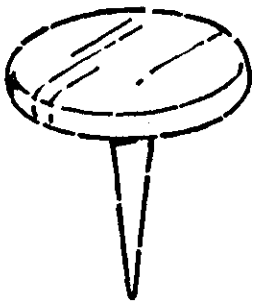

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Sound

SOUND MATCHING TEST

Beginning Position

- 4: Sound Lotto *pictures*
- 5: Sort
- 6: Sort
- 7: Sound Lotto
- 8: Word Matching Card Game
- 9: Word Matching Card Game
- 4: Sound Lotto *letters*
- 12: House Game
- 11: Lion Crackaloo
- take-home Sort Game

Extra Help

- 1: Sort
- 2: Sort
- ___Sound Practice Sheet 1
- ___Sound Practice Sheet 2
- ___Sound Practice Sheet 3
- ___Sound Practice Sheet 4
- ___Sound Practice Sheet 5
- ___Sound Practice Sheet 6

Last Position

- 14: Sort
- 15: Picture Gallery
- 16: Monkey Crackaloo
- ___Sound Practice Sheet 7

Contrasting Positions

- 19: House Game
- 20: Picture Gallery
- 21: Bear Crackaloo
- take-home Word Matching Game
- take-home House Game
- ___Sound Practice Sheet 8

Sound-Picture Associations

/f/	/ō/	/s/ /m/
/t/	/b/	/a/ /ē/
/u/	/k/	/h/ /p/
/d/	/i/	/sh/ /n/
/ou/	/e/	/o/ /th/

Letter-Sound Correspondences

t	m	b	s					
n	a	i	d					
f	u	p	sh					
e	h							

- SOUND BLENDING TEST
- 27: Blending Puzzles
- 26: Rhyming Lotto
- 28: Seal Crackaloo
- take-home Word Families Game
- take-home Blending Bingo
- ___Sound Practice Sheet 9
- ___Sound Practice Sheet 10
- ___Sound Practice Sheet 11

Visual

VISUAL PRELIMINARIES

- ___Visual Practice Sheet 2
- ___Visual Practice Sheet 3

LETTER ORDER TEST

Letter Order A

- 36: Lotto
- 37: Pick a Pair
- 39: Dominoes
- take-home Apple Game
- take-home Space Game

Extra Help

- 36: see-through Lotto
- 35: Shape Pick a Pair

Letter Order B

- 40: Lotto
- 41: Word Twins
- ___Visual Practice Sheet 4
- ___Visual Practice Sheet 5
- ___Visual Practice Sheet 6
- ___Visual Practice Sheet 7
- ___Visual Practice Sheet 11
- ___Visual Practice Sheet 12
- ___Visual Practice Sheet 13
- ___Visual Practice Sheet 14

LETTER ORIENTATION TEST

Letter Orientation A

- take-home Balloon Game

Letter Orientation B

- 43: Lotto
- 44: Dominoes
- 42: Same and Different Game

Extra Help

- 43: see-through Lotto
- 45: Pick a Pair
- ___Visual Practice Sheet 8
- ___Visual Practice Sheet 15
- ___Visual Practice Sheet 16
- ___Visual Practice Sheet 17

WORD DETAIL TEST

Word Detail A

- 47: Lotto
- 46: Word Twins
- 48: Pick a Pair
- take-home Octopus Game

Word Detail B

- 49: Double Match
- 50: Word Twins
- ___Visual Practice Sheet 9
- ___Visual Practice Sheet 10
- ___Visual Practice Sheet 18
- ___Visual Practice Sheet 19
- ___Visual Practice Sheet 20

VISUAL REVIEW PRACTICE SHEETS

- ___Visual Practice Sheet 21
- ___Visual Practice Sheet 22
- ___Visual Practice Sheet 23
- ___Visual Practice Sheet 24
- ___Visual Practice Sheet 25

Lotto

Name of pupil _____

APPENDIX F

Letters to Parents of Pre-Readers

To: Parents of Future Kindergarten Students

I am a graduate student of the University of Wisconsin-LaCrosse. I am doing a research study on the experiences of four year olds. I wish to measure how many experiences the children have already had.

If your child is four years old now, I would like to have permission to use him or her in my research. The name of the child will not be used in the study.

However, the information on your child's experiences will be a help to the kindergarten teacher. I will make sure that she receives this information.

If you wish to know the results of the study, I will be happy to mail you a copy of the final results.

If you are willing to help, please fill out the permission form.

Thank you,

Kindergarten Round-up

Name of child_____

Birth date_____

Parents' name_____

I am willing to permit my child to be a part of Mrs. Schmidt's research on the experience of four year olds.

_____
(Signed by parent)

Do you wish to receive a copy of the final results of the research?

Yes____ No____

If yes, address_____

_____

APPENDIX G

Research Instrument

Response Sheet

	Yes	No
Example: hand	____	____
A: Zoo Animals		
1 tiger	____	____
2 penguins	____	____
3 polar bear	____	____
4 lion	____	____
5 monkey	____	____
6 kangaroo	____	____
7 gorilla	____	____
8 camel	____	____
B: Home-Family		
9 salad	____	____
10 hamburger	____	____
11 macaroni	____	____
12 coffee	____	____
13 pillows	____	____
14 rugs	____	____
15 lightbulb	____	____
16 medicine	____	____
17 toothpaste	____	____
18 lawn mower	____	____
19 fireplace	____	____
20 make-up	____	____
C: Pets, Playthings, Playmates		
a21 fish	____	____
22 dog	____	____
23 cat	____	____
24 lamb	____	____
b25 books	____	____
26 toys	____	____
27 scissors	____	____
28 colors	____	____
c29 doctor	____	____
30 cowboy	____	____
31 birthday	____	____
D: Farm Animals		
32 calf	____	____
33 pigs	____	____
34 horse	____	____
35 cows	____	____
E: Farm		
36 silo	____	____
37 corn	____	____
38 baler	____	____
39 milking	____	____
40 void	____	____

Response Sheet (continued)

F: Modes of Travel

41 canoe ____ ____
42 barge ____ ____
43 jet ____ ____
44 semi ____ ____
45 camper ____ ____
46 car ____ ____

G: Nature

47 mountains ____ ____
48 waterfall ____ ____
49 sunflowers ____ ____
50 raccoons ____ ____
51 lightning ____ ____
52 deer ____ ____
53 sand ____ ____
54 dam ____ ____

H: Hobbies-Sports

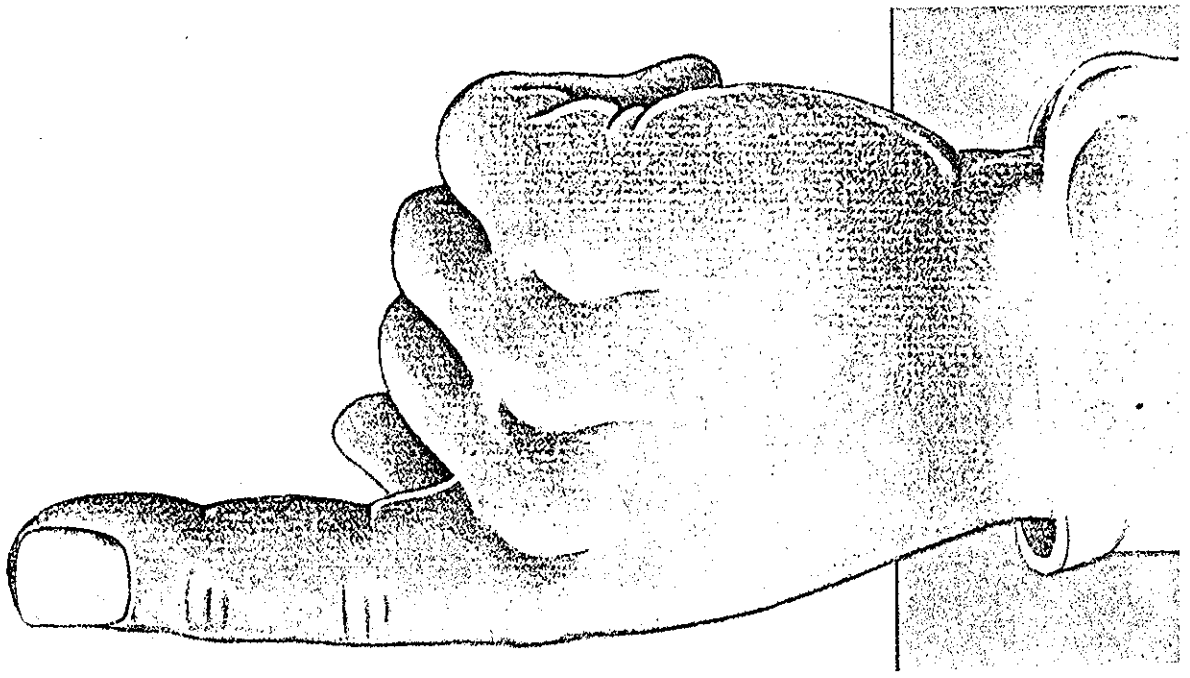
55 camera ____ ____
56 tent ____ ____
57 radishes ____ ____
58 hiker ____ ____
59 tennis ____ ____
60 reel ____ ____
61 bowling ____ ____
62 fishing ____ ____

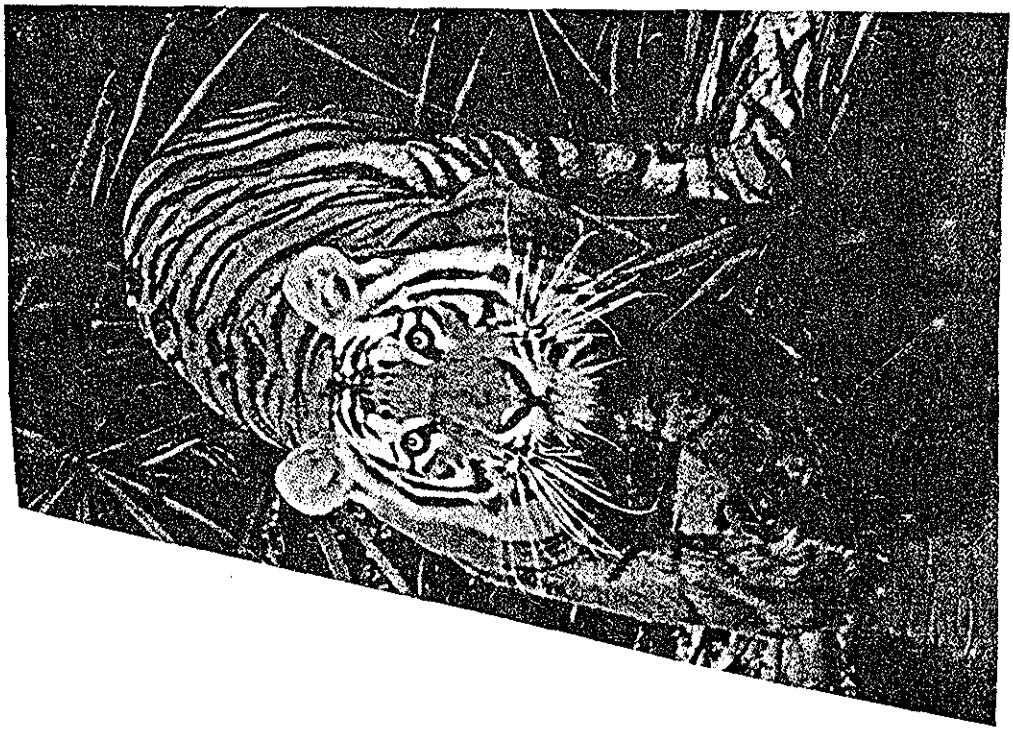
I: Community Workers

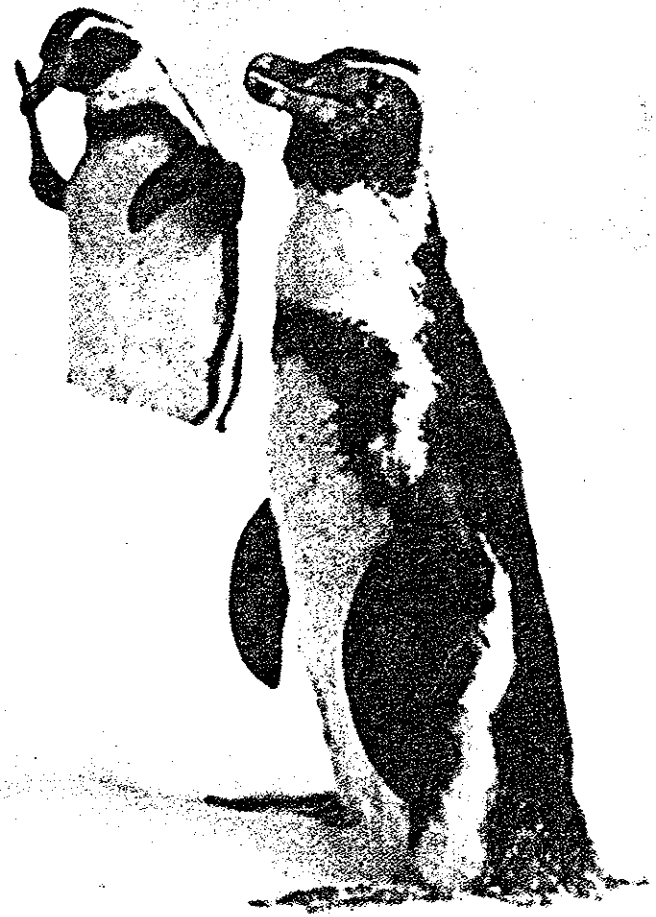
63 cart ____ ____
64 baker ____ ____
65 fireman ____ ____
66 police car ____ ____
67 nurse ____ ____
68 policemen ____ ____
69 movers ____ ____
70 const. worker ____ ____
71 dentist ____ ____
72 mailman ____ ____
73 mailmen ____ ____
74 barber ____ ____

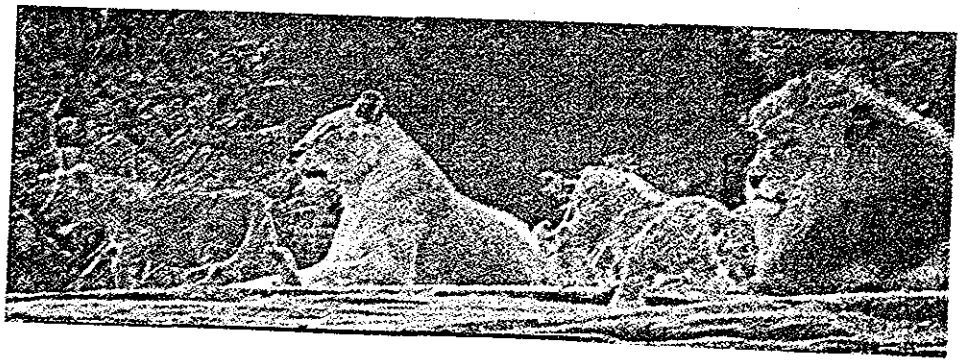
J: Communication

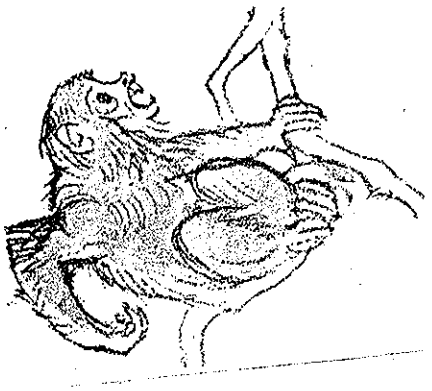
75 town ____ ____
76 city ____ ____
77 TV ____ ____
78 magazines ____ ____
79 newspaper ____ ____
80 telephone ____ ____
81 letter ____ ____
82 money ____ ____
83 factory ____ ____
84 laboratory or chemist ____ ____

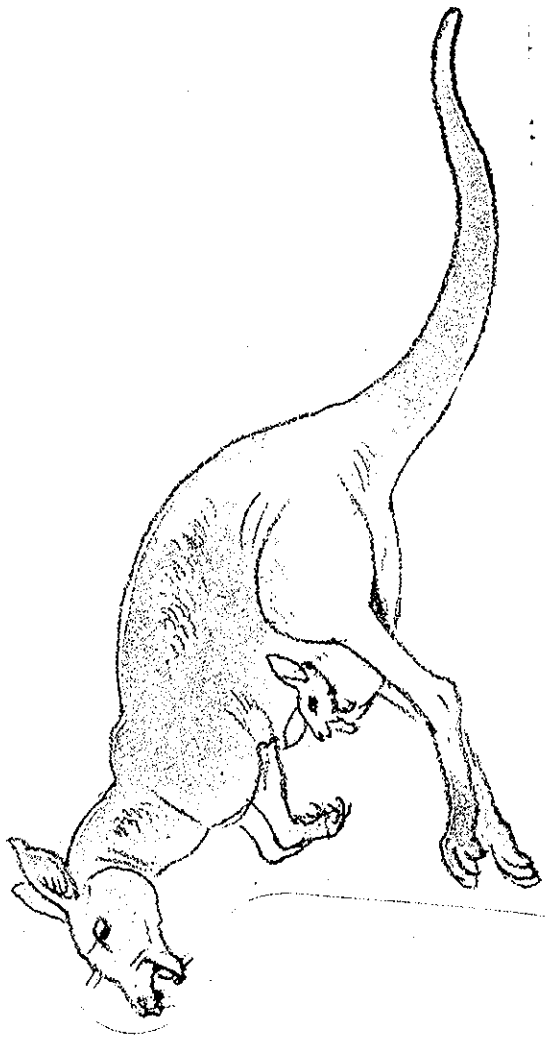


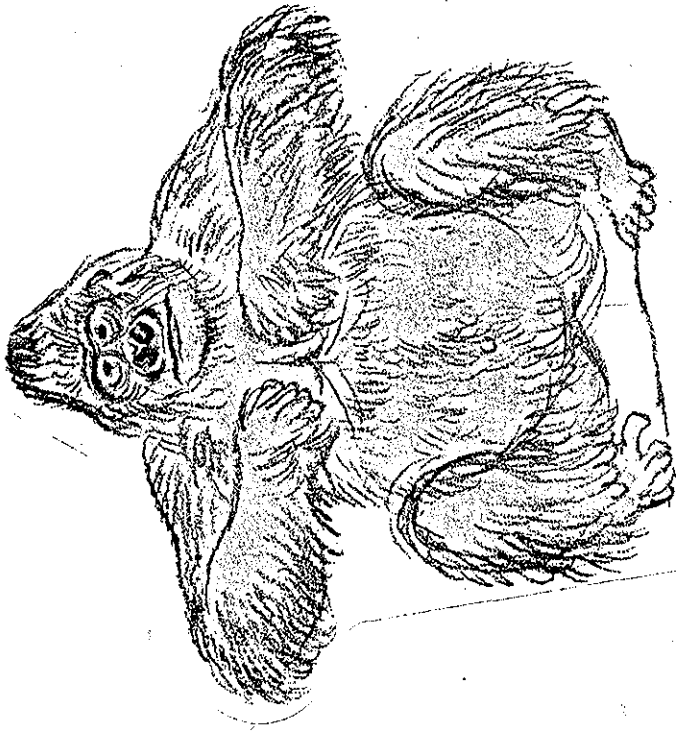


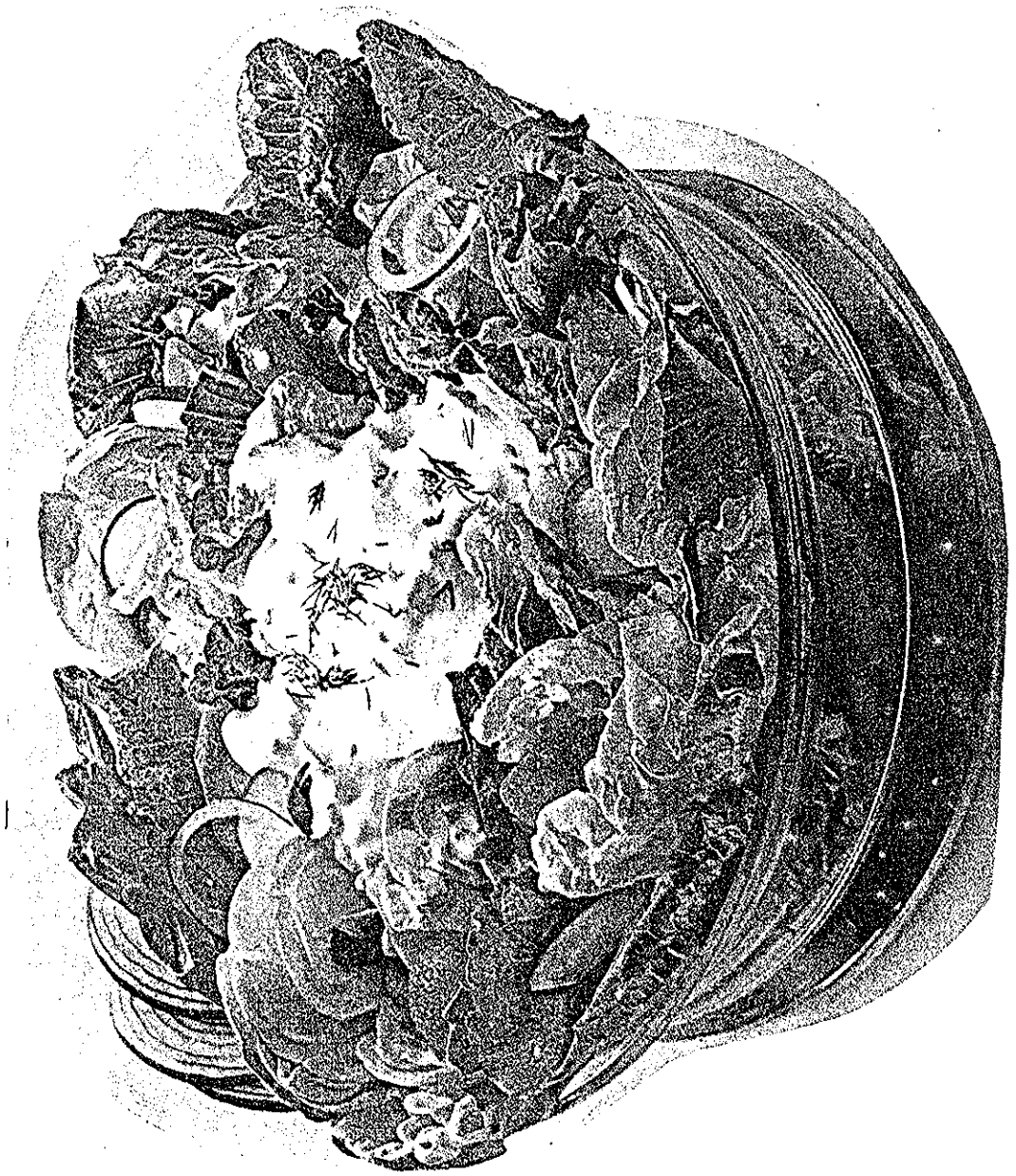


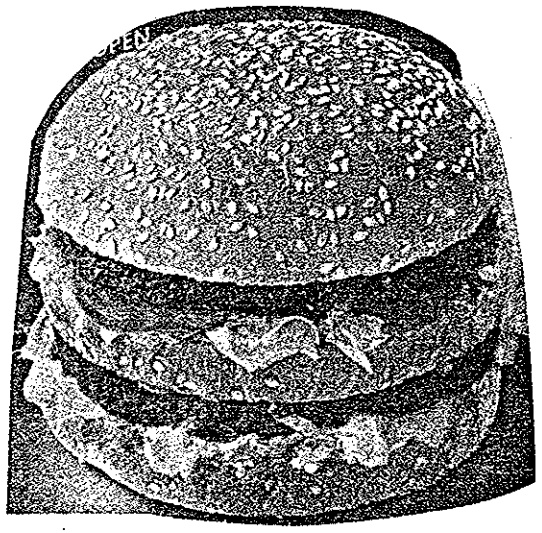


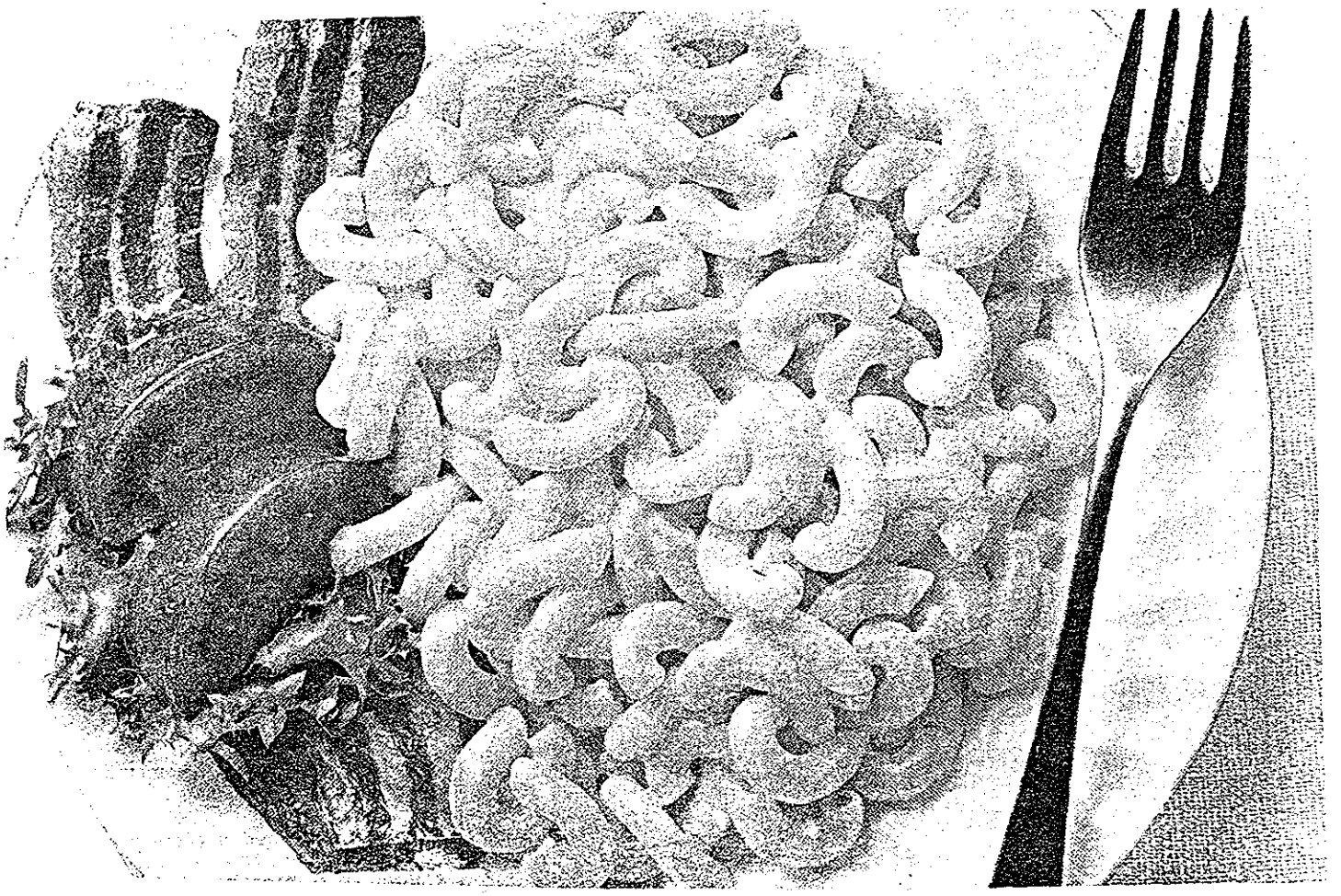


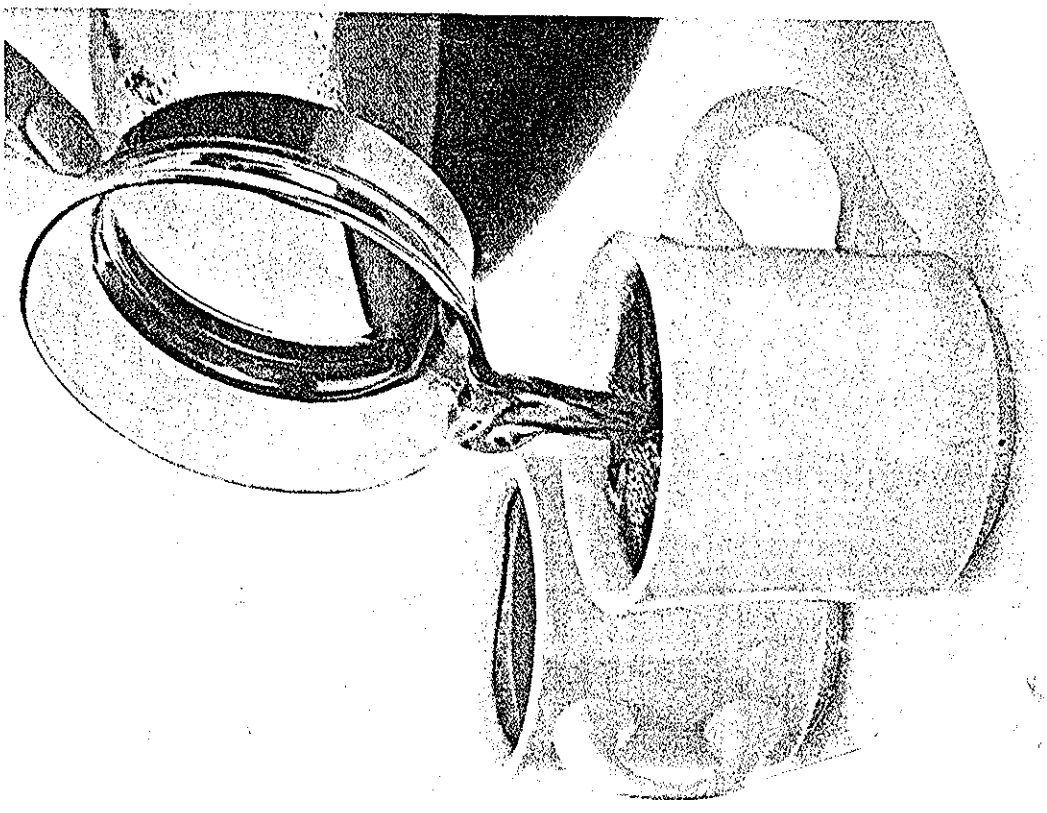


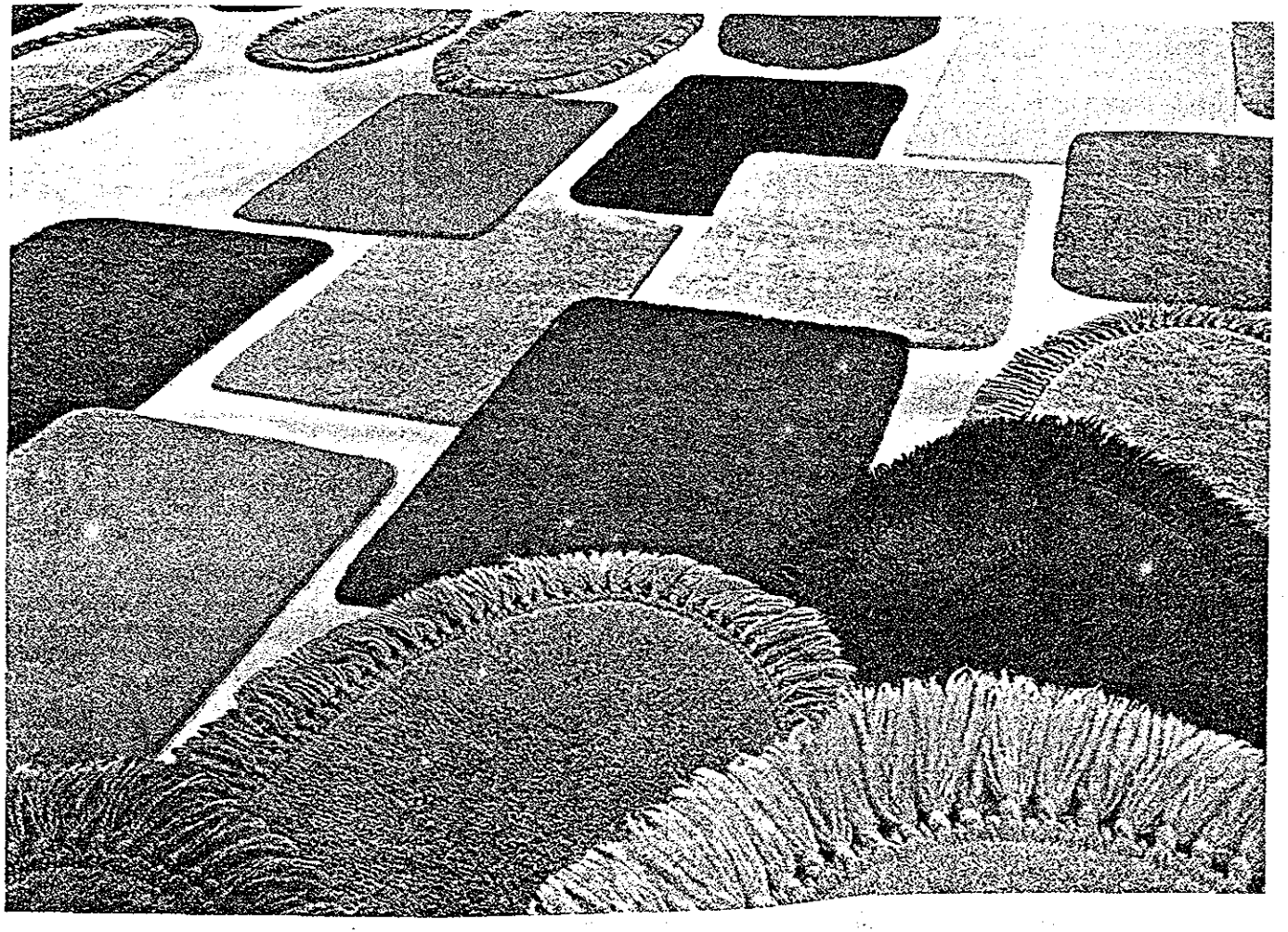


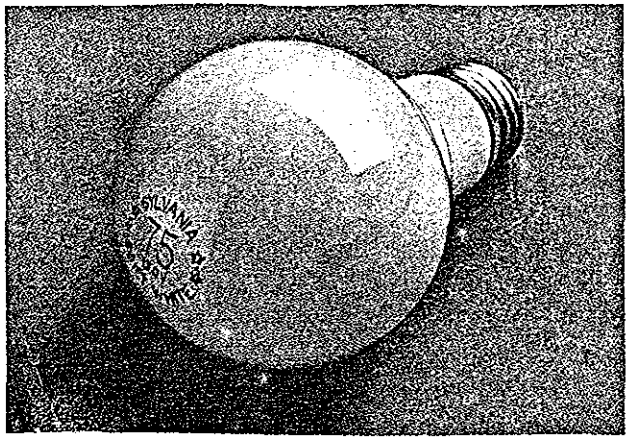


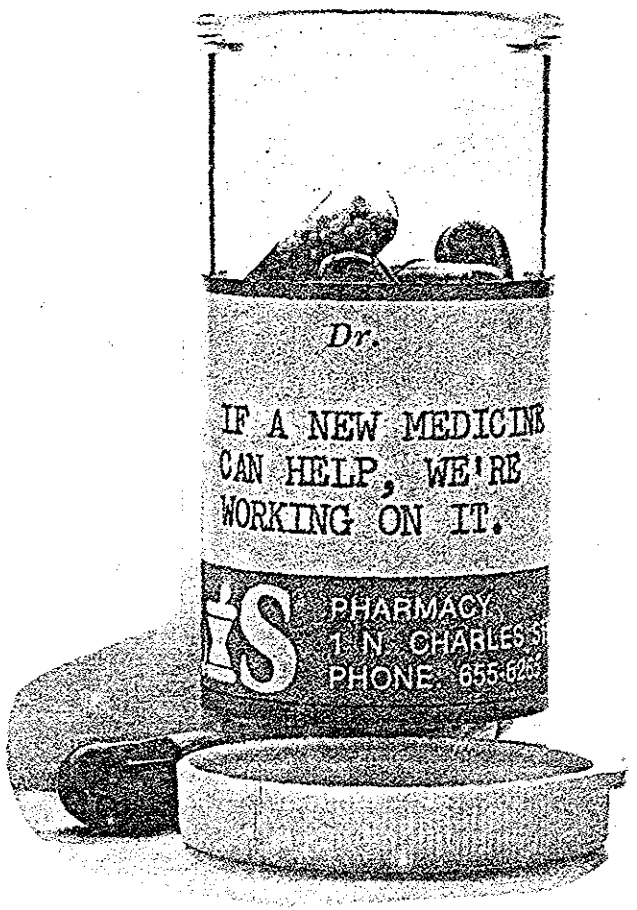


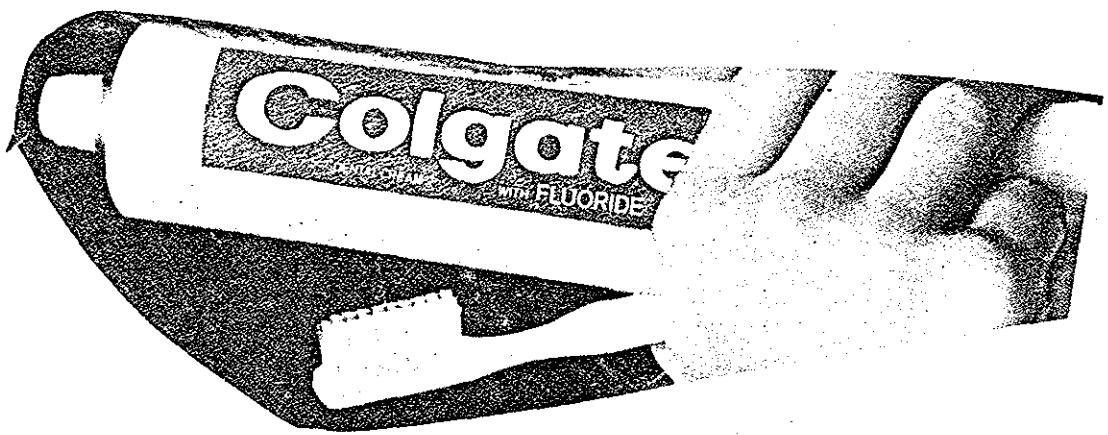


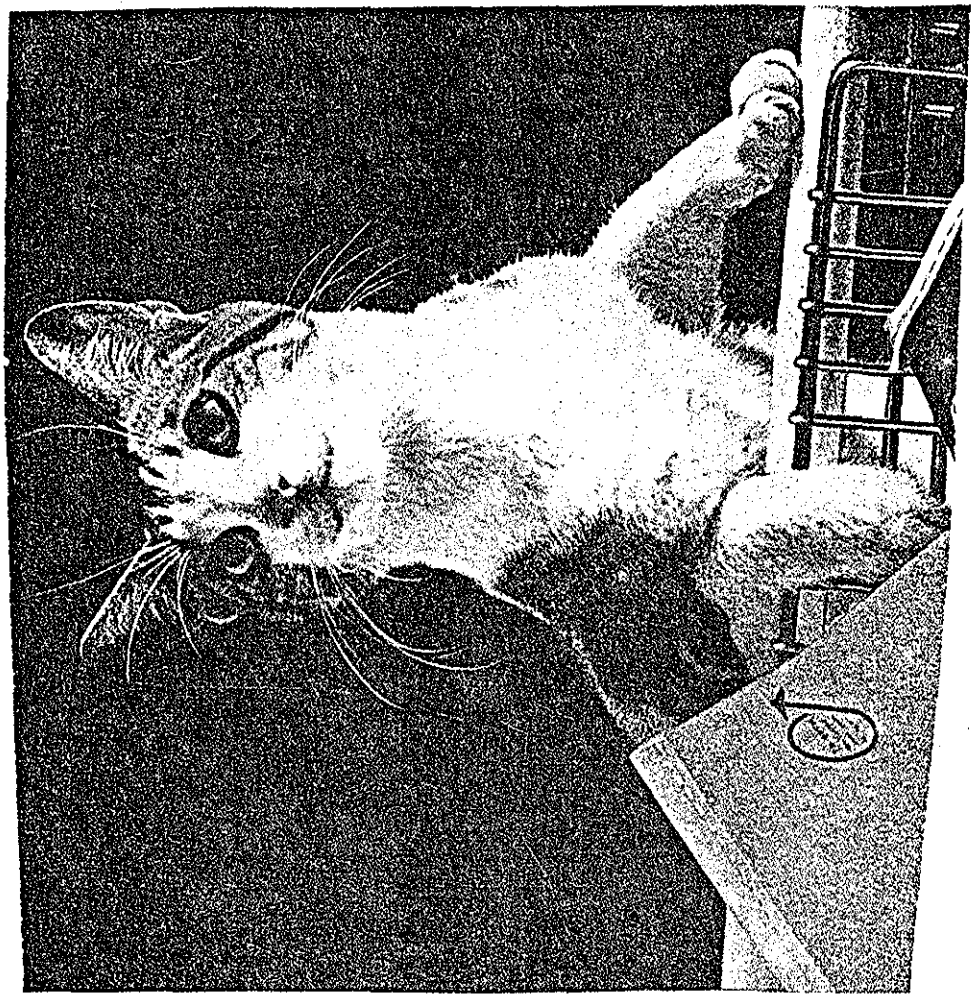


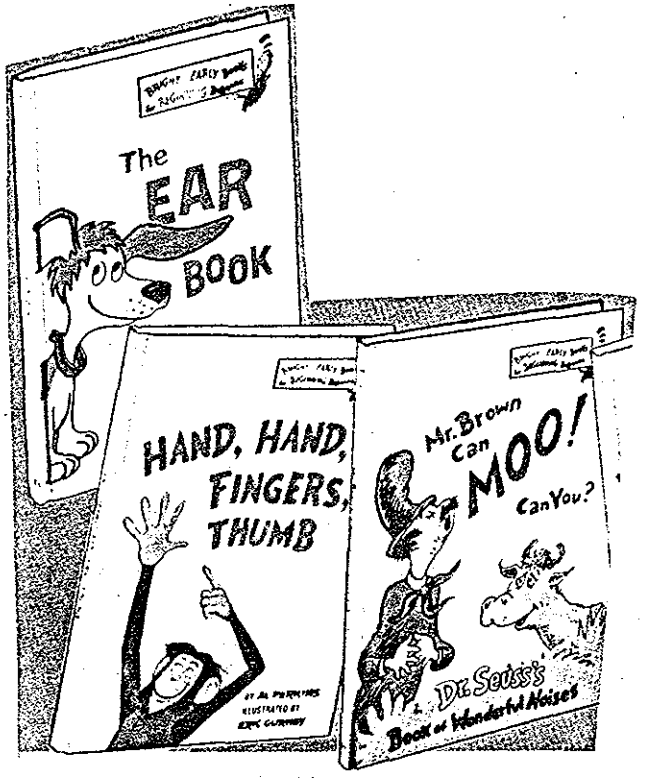


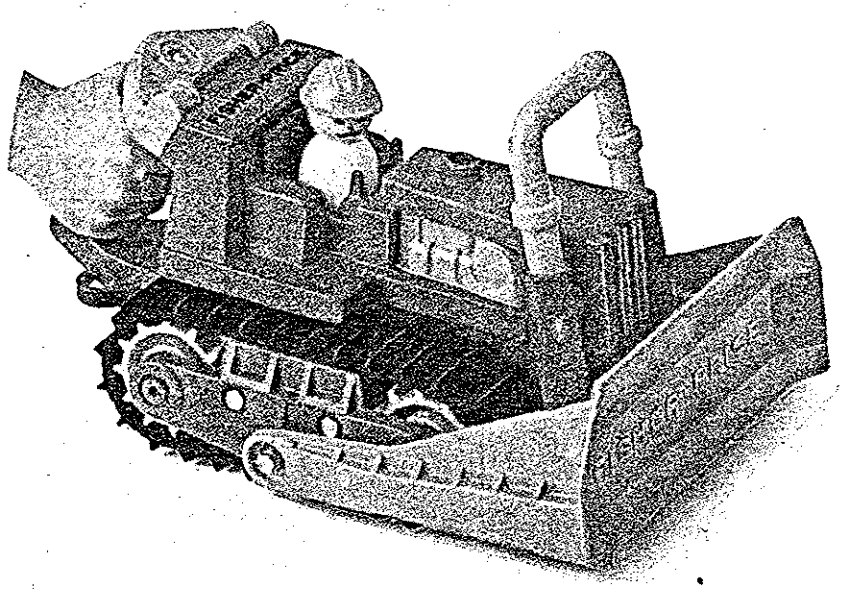

SYLVANIA
75
WATTS

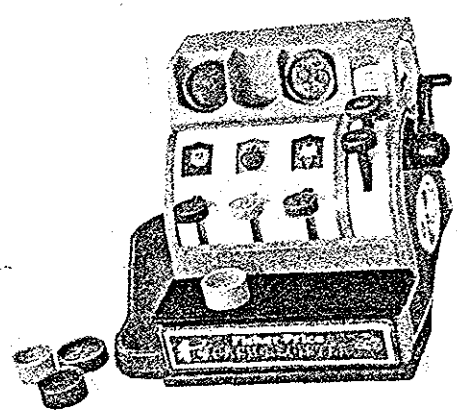

Dr.
IF A NEW MEDICINE
CAN HELP, WE'RE
WORKING ON IT.
PHARMACY
1 N. CHARLES ST
PHONE 655-62

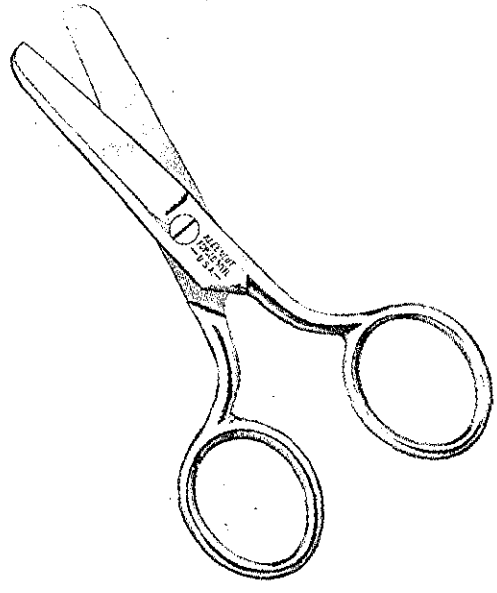

Colgate
WITH FLUORIDE




The
EAR
BOOK
HAND, HAND,
FINGERS,
THUMB
Mr. Brown
Can
MOO!
Can You?
Dr. Seuss's
Book of Wonderful Noises

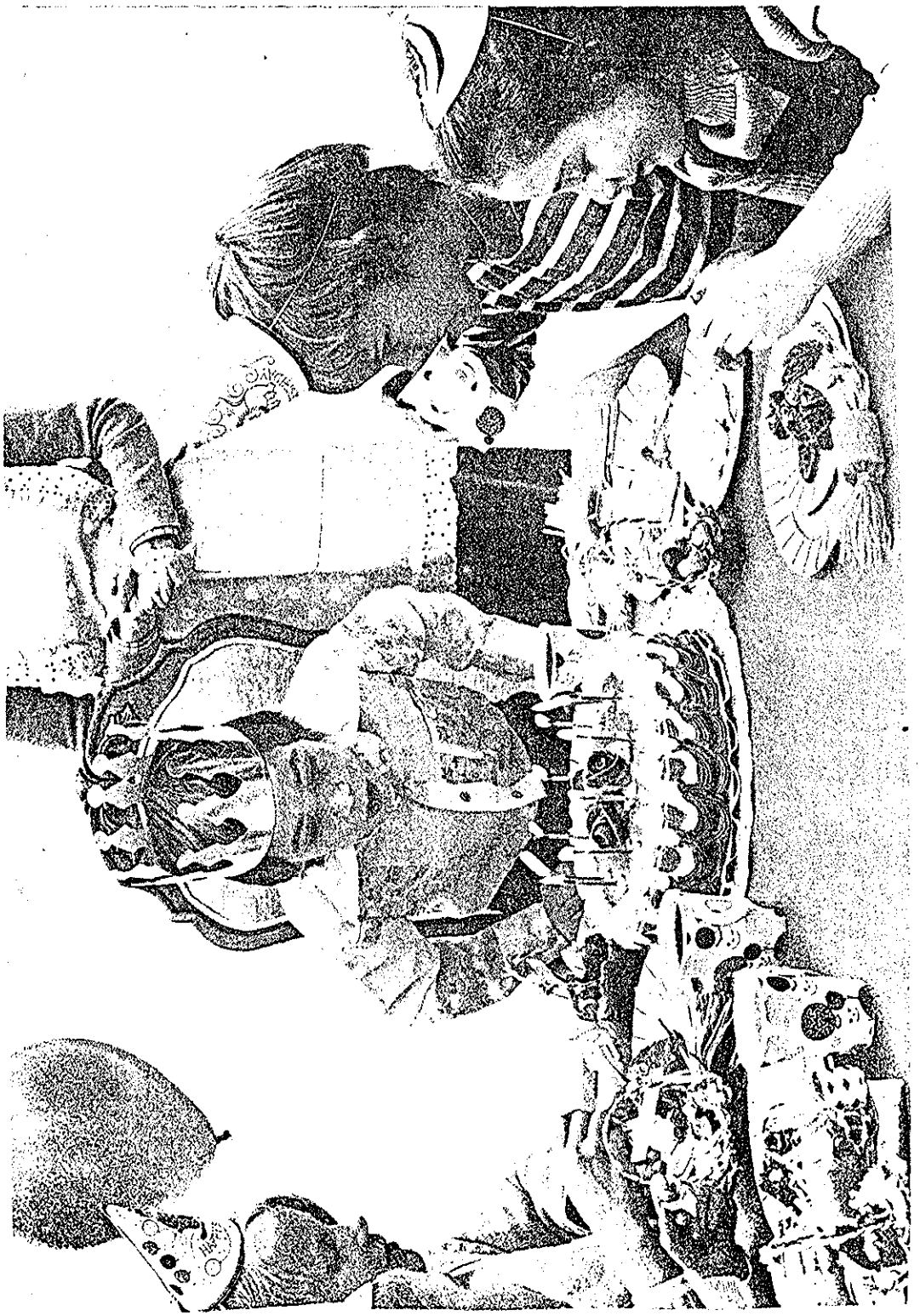


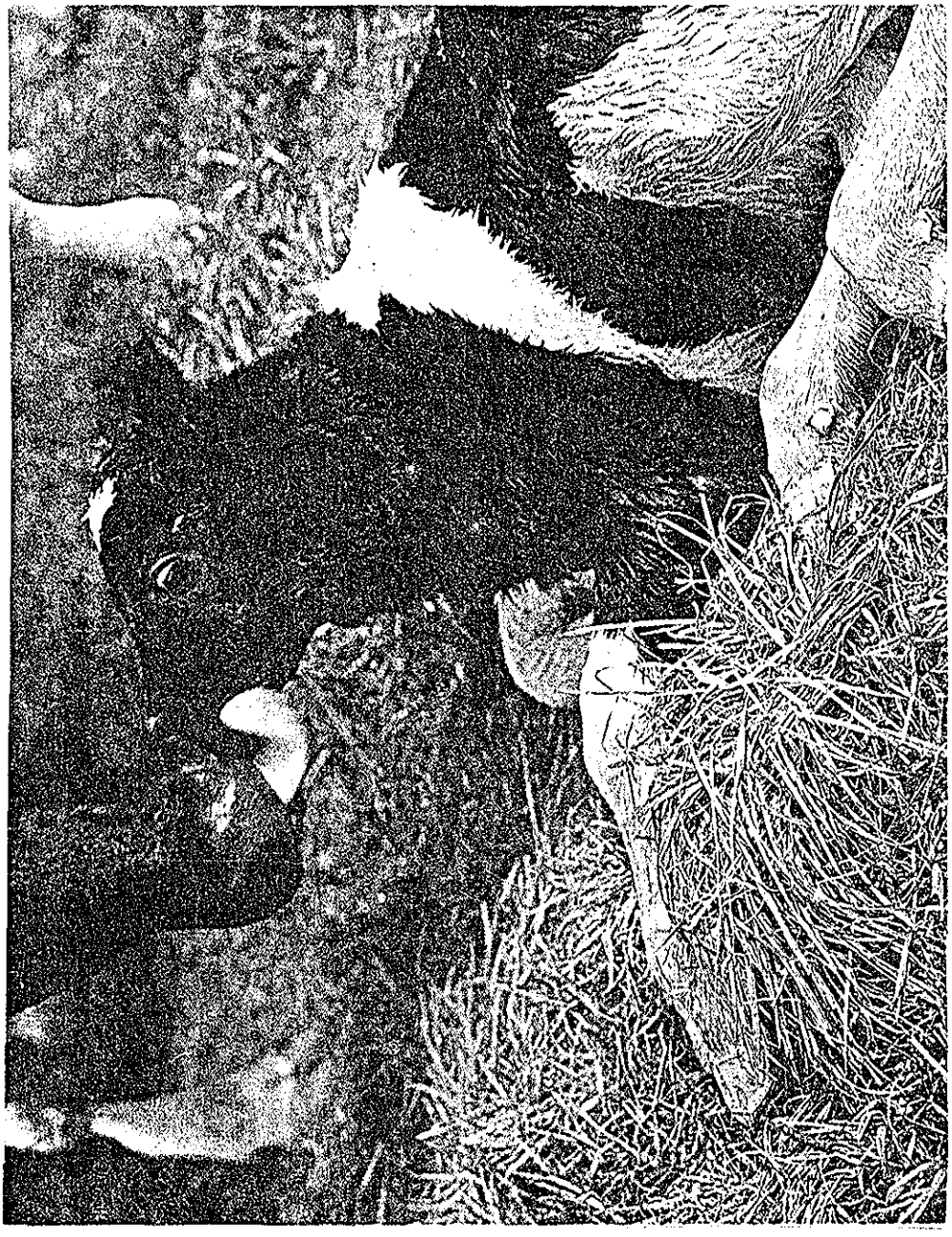


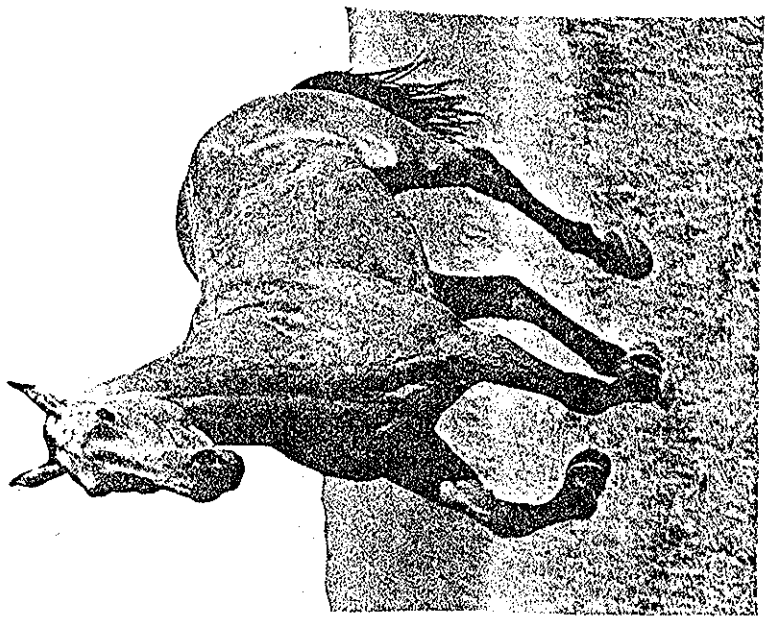


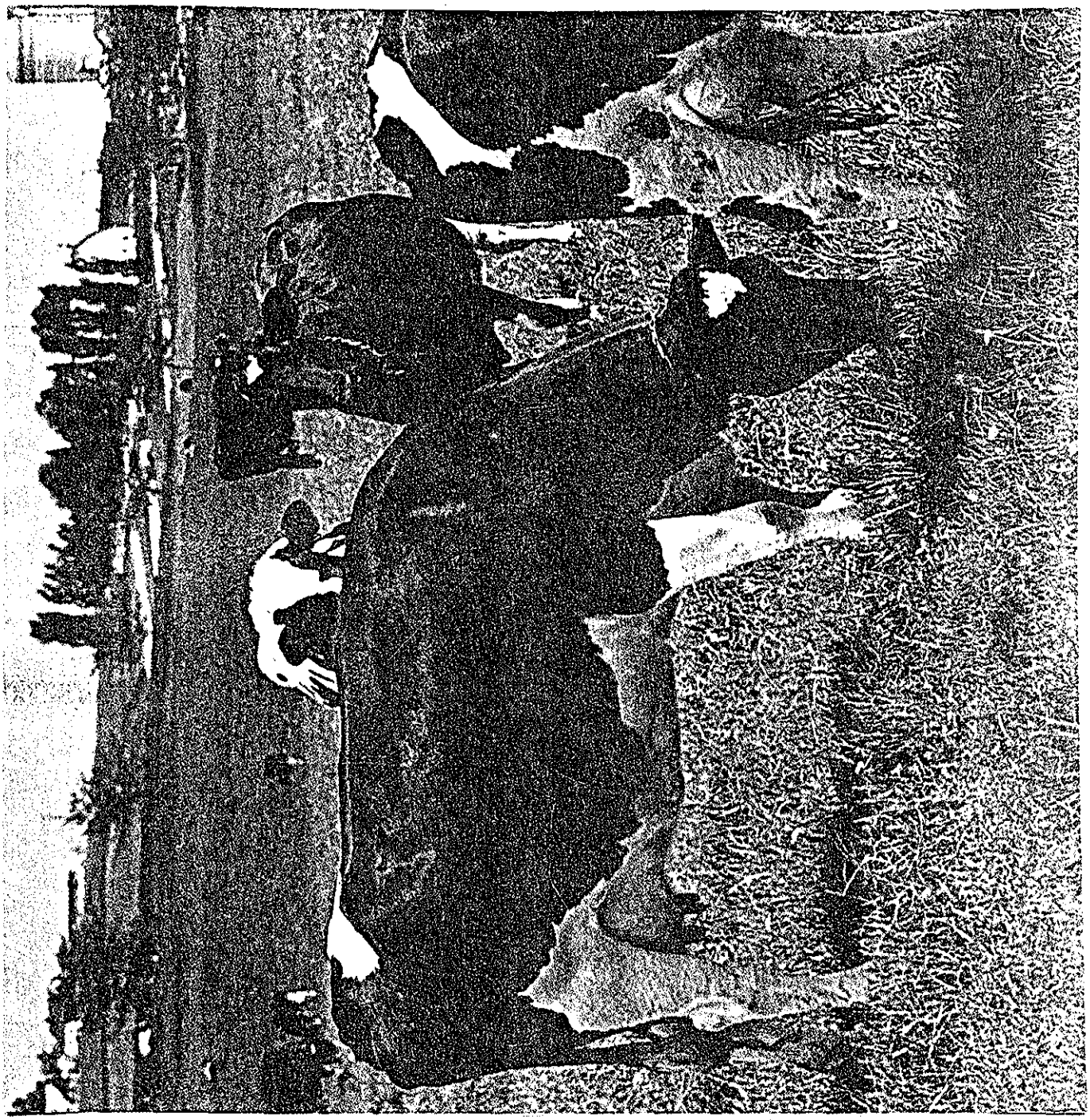

Crayola
CRAYONS
Different
Brilliant Colors
NON-TOXIC
Crayola
Crayola

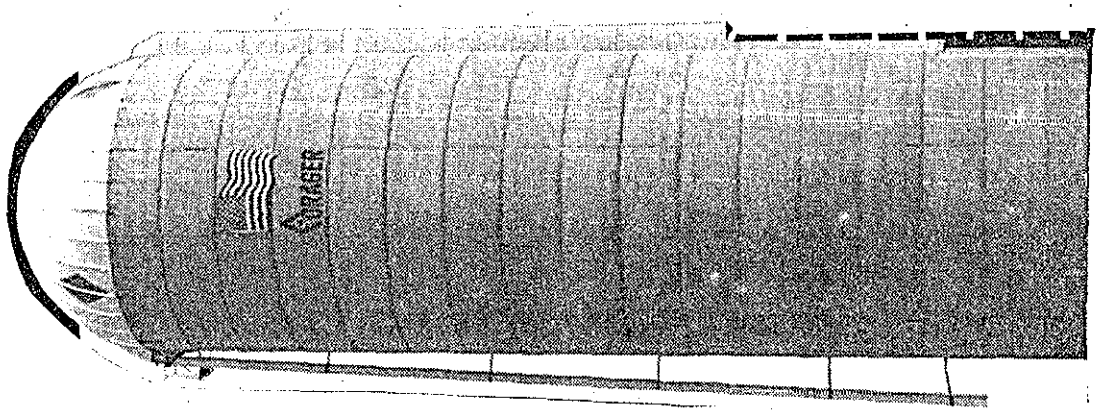

Crayola
CRAYONS
BUILT-IN SHARPENER
CRAYOLA CRAYONS







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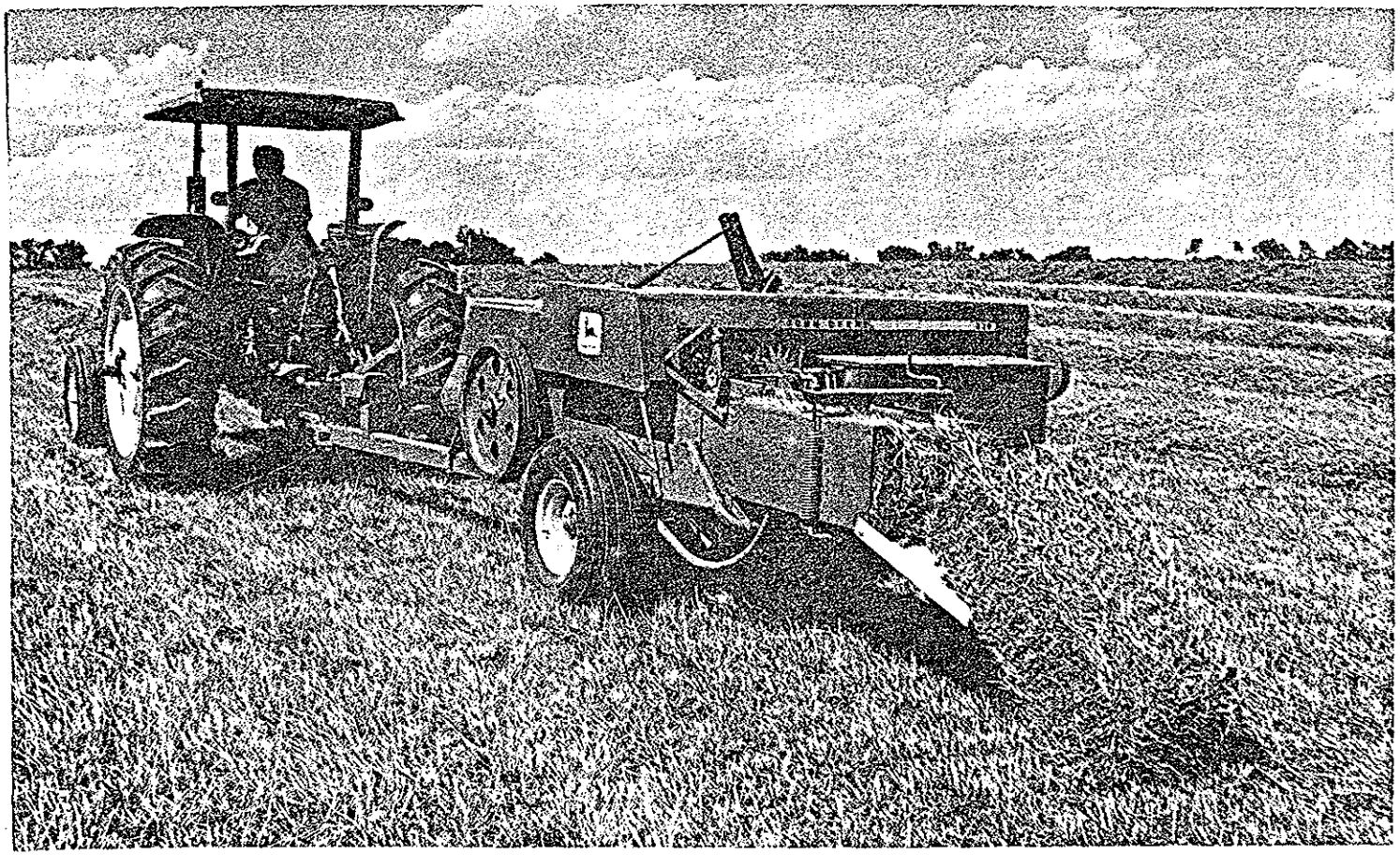

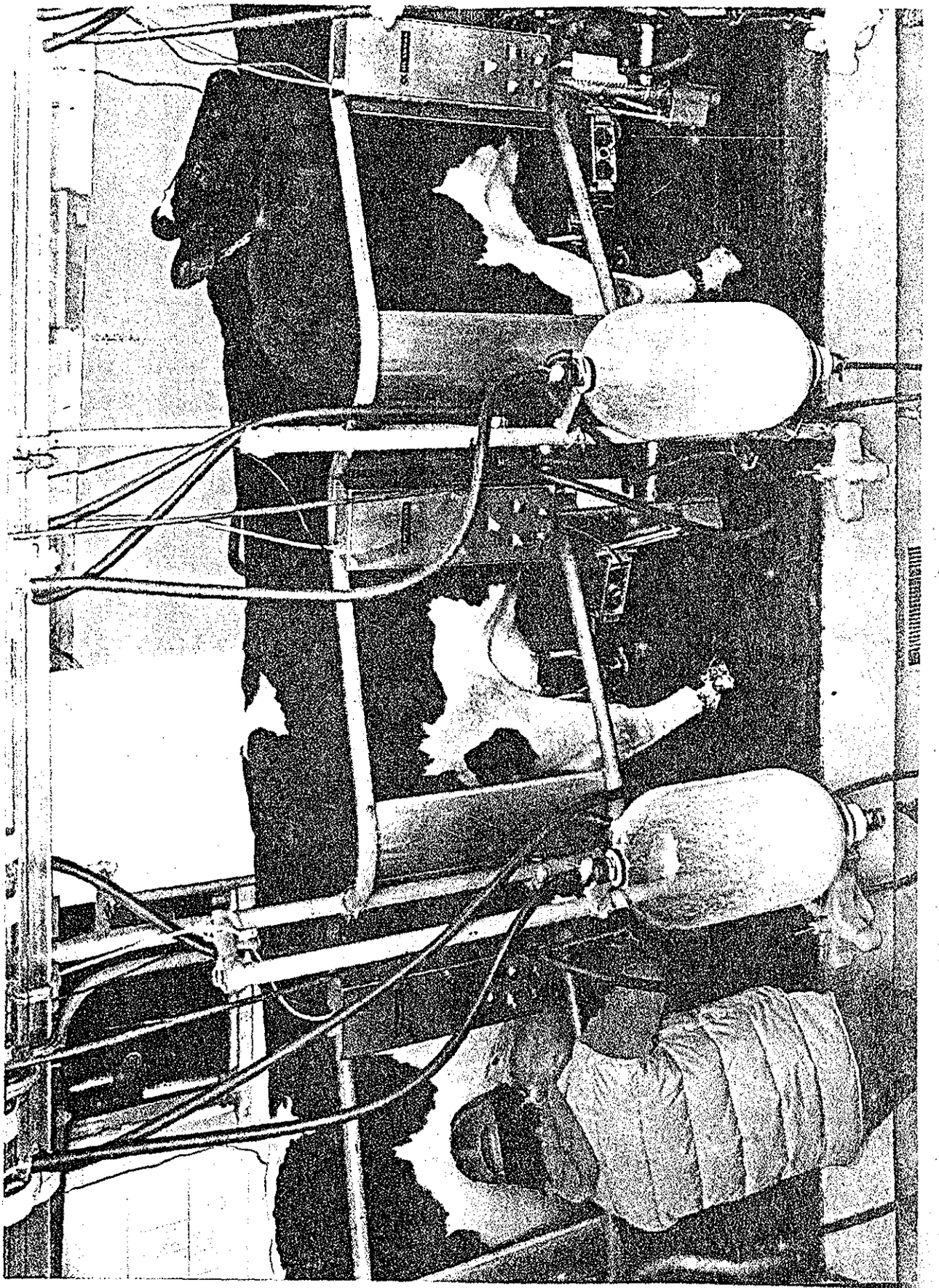

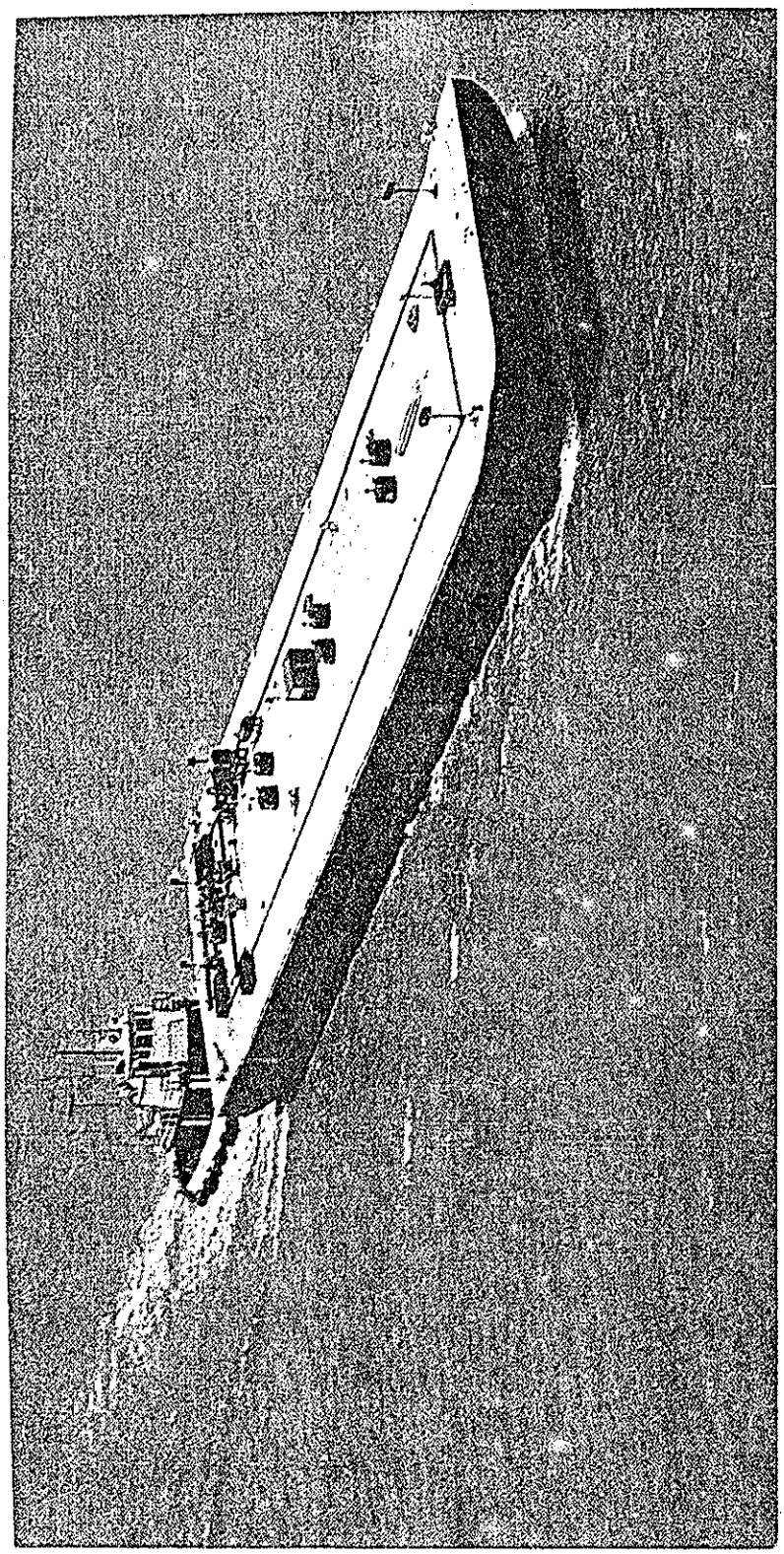

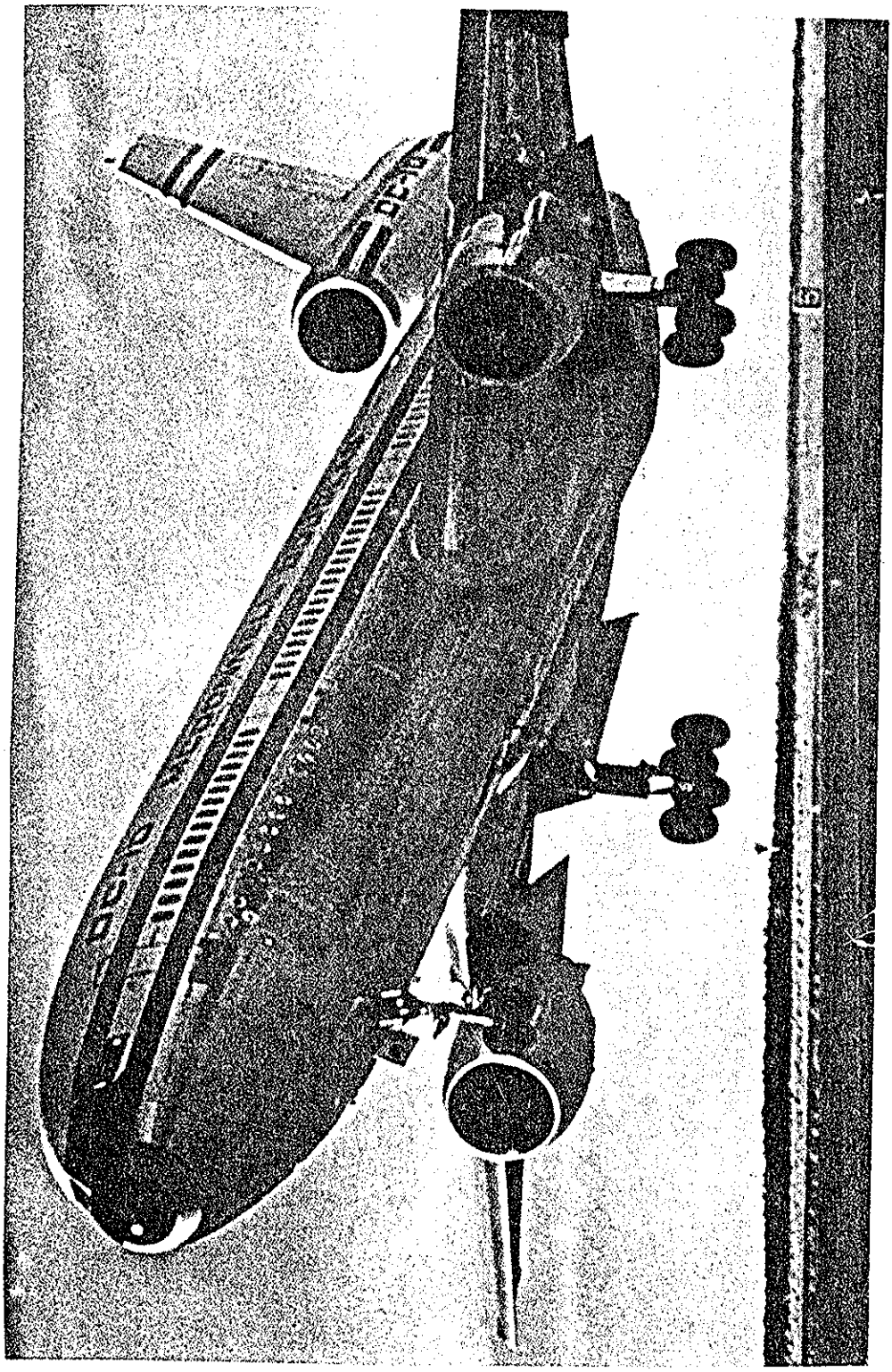

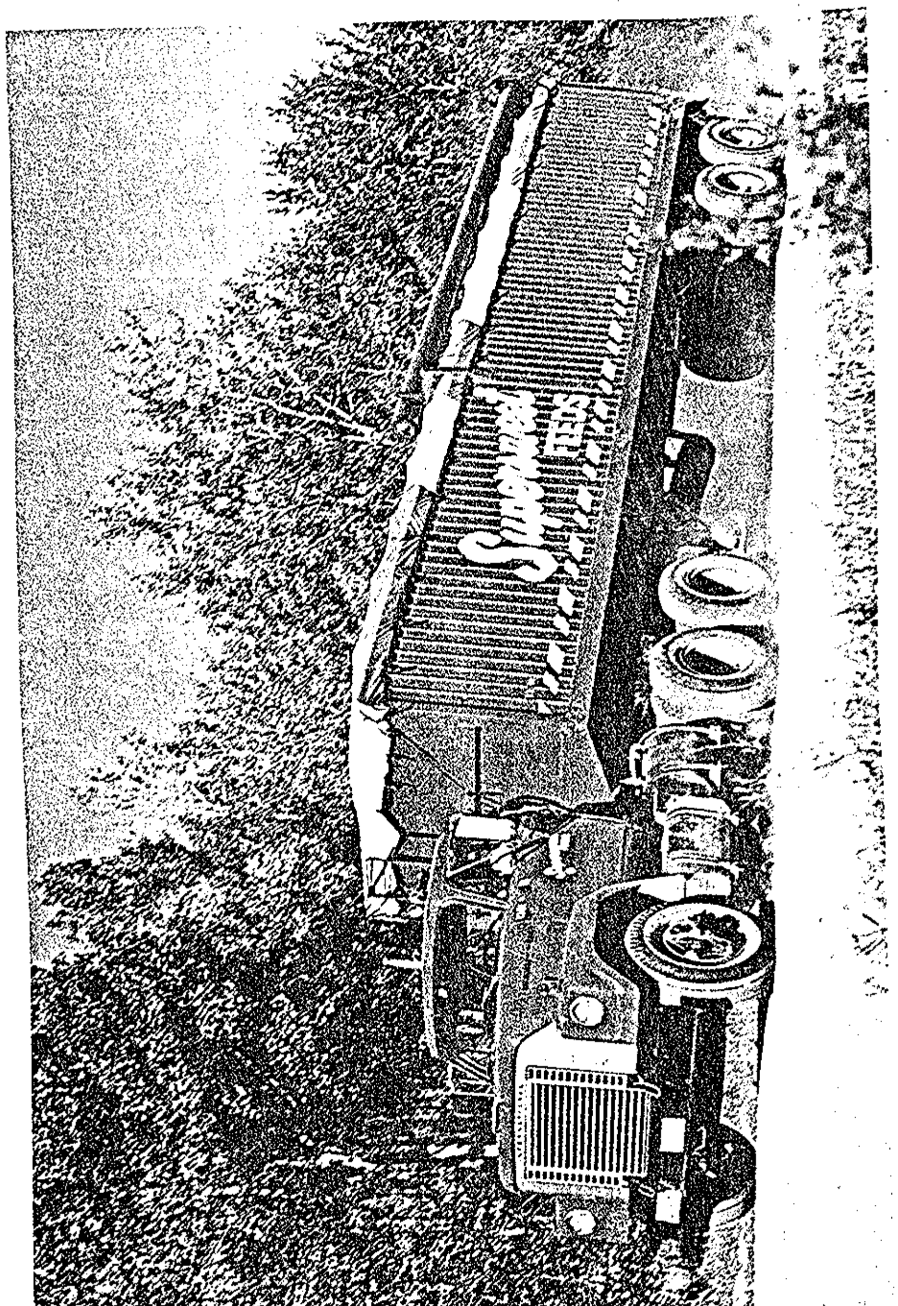

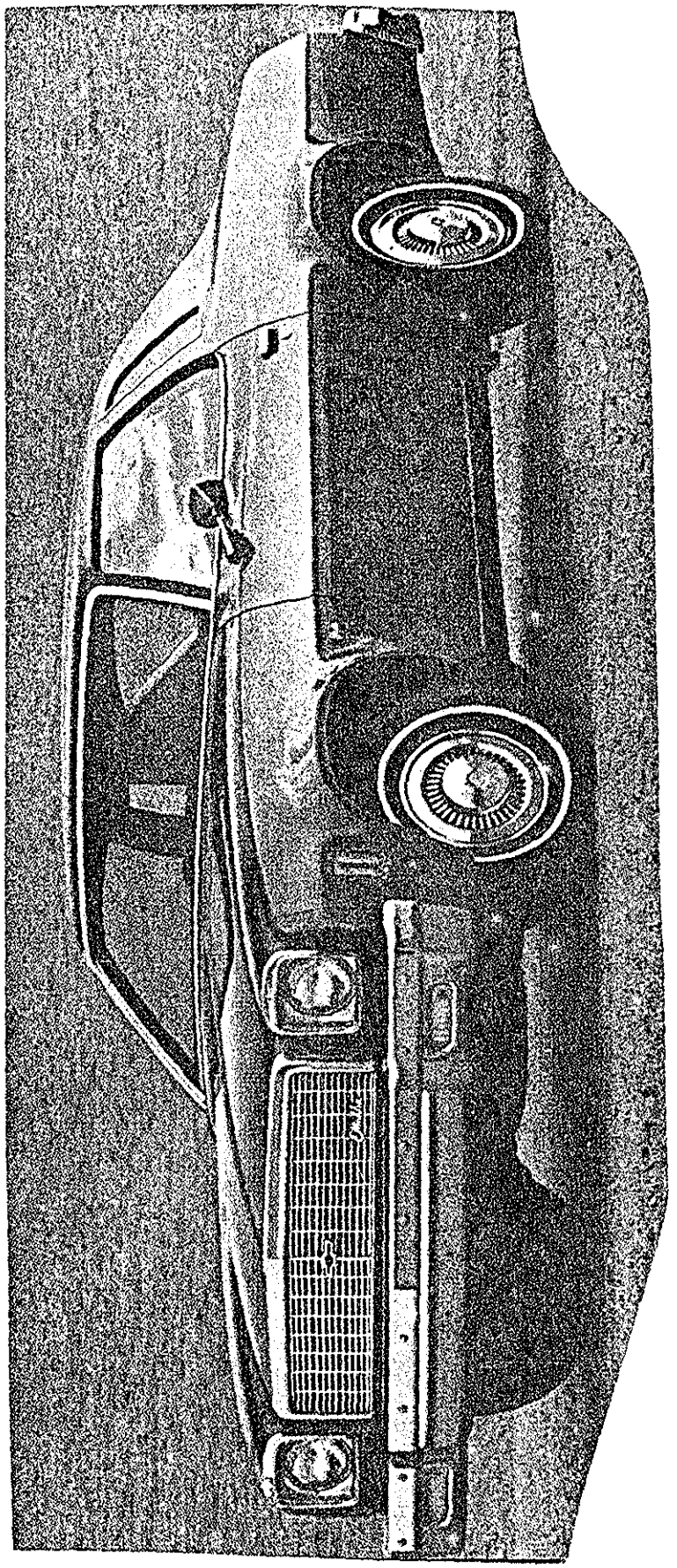

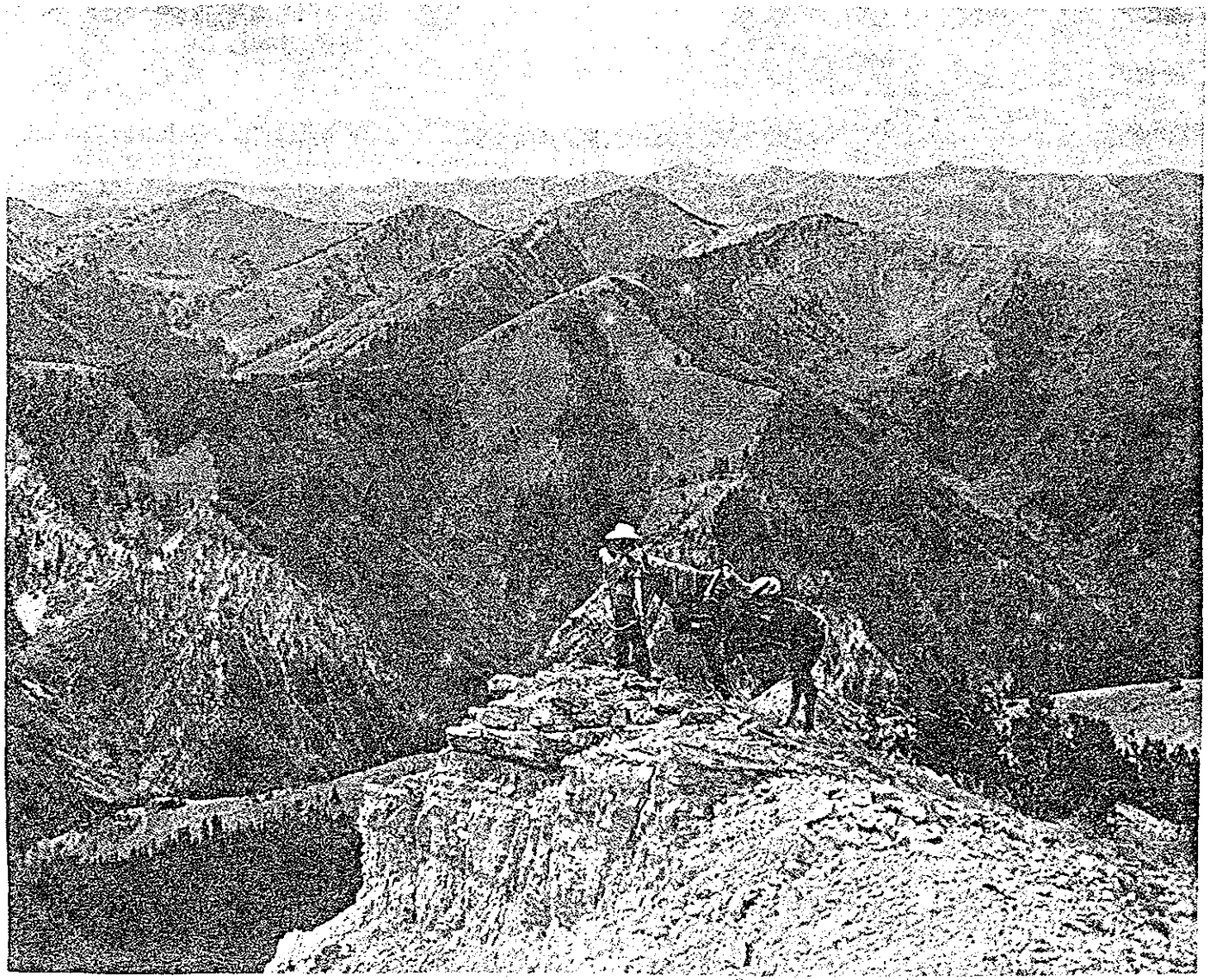

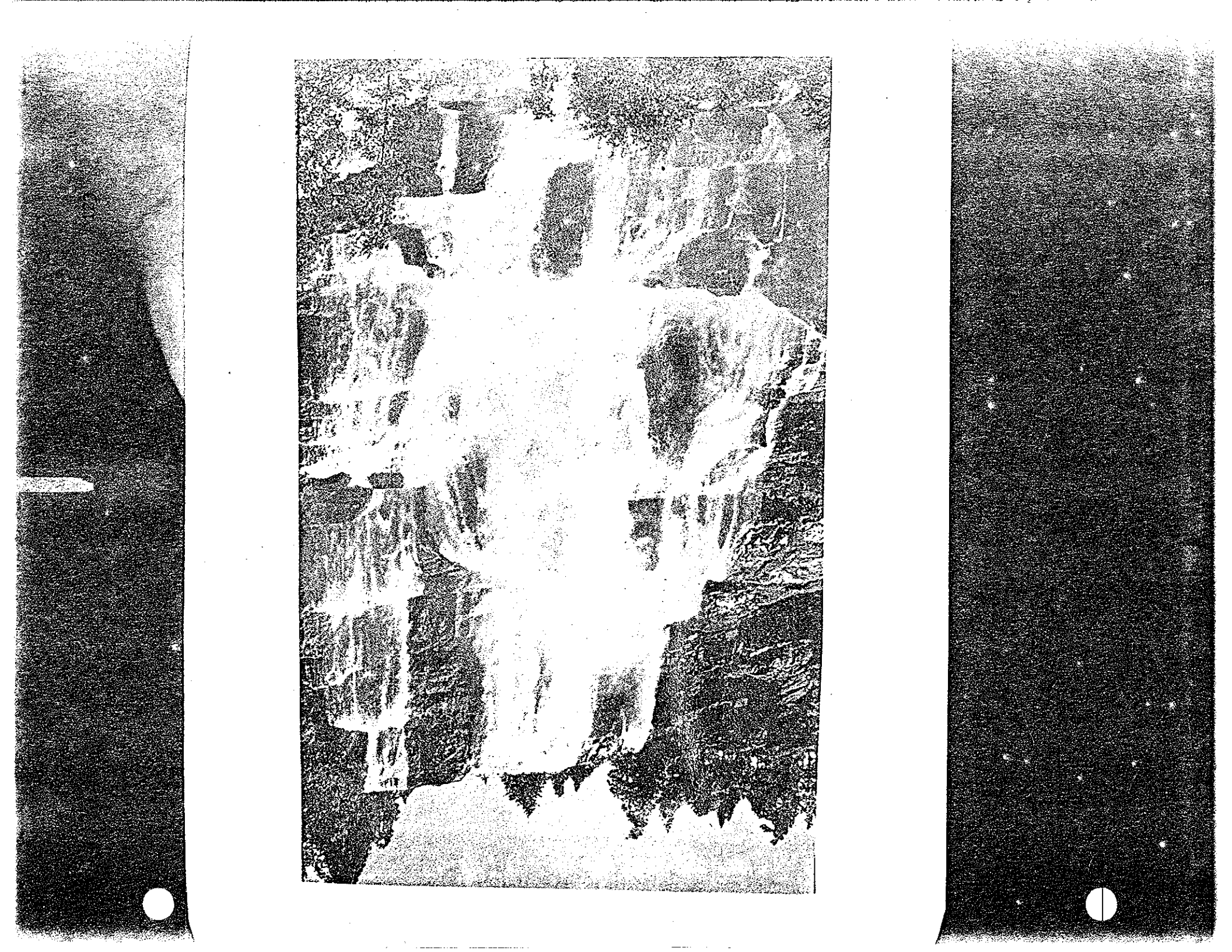

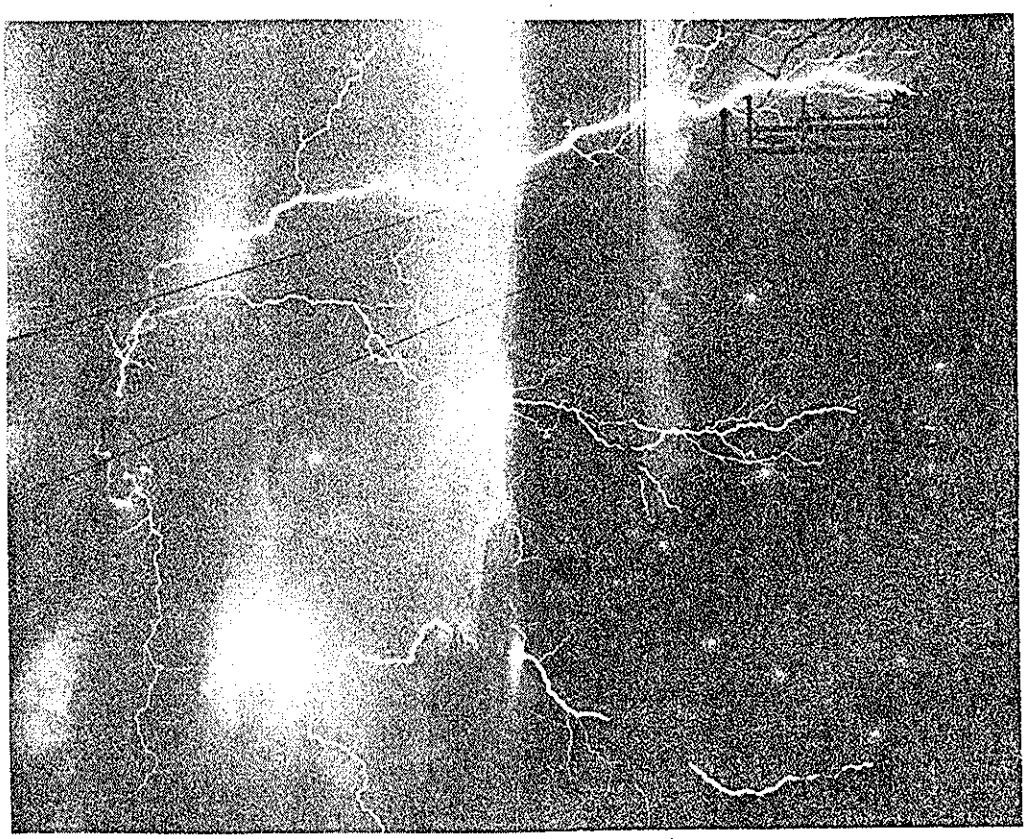


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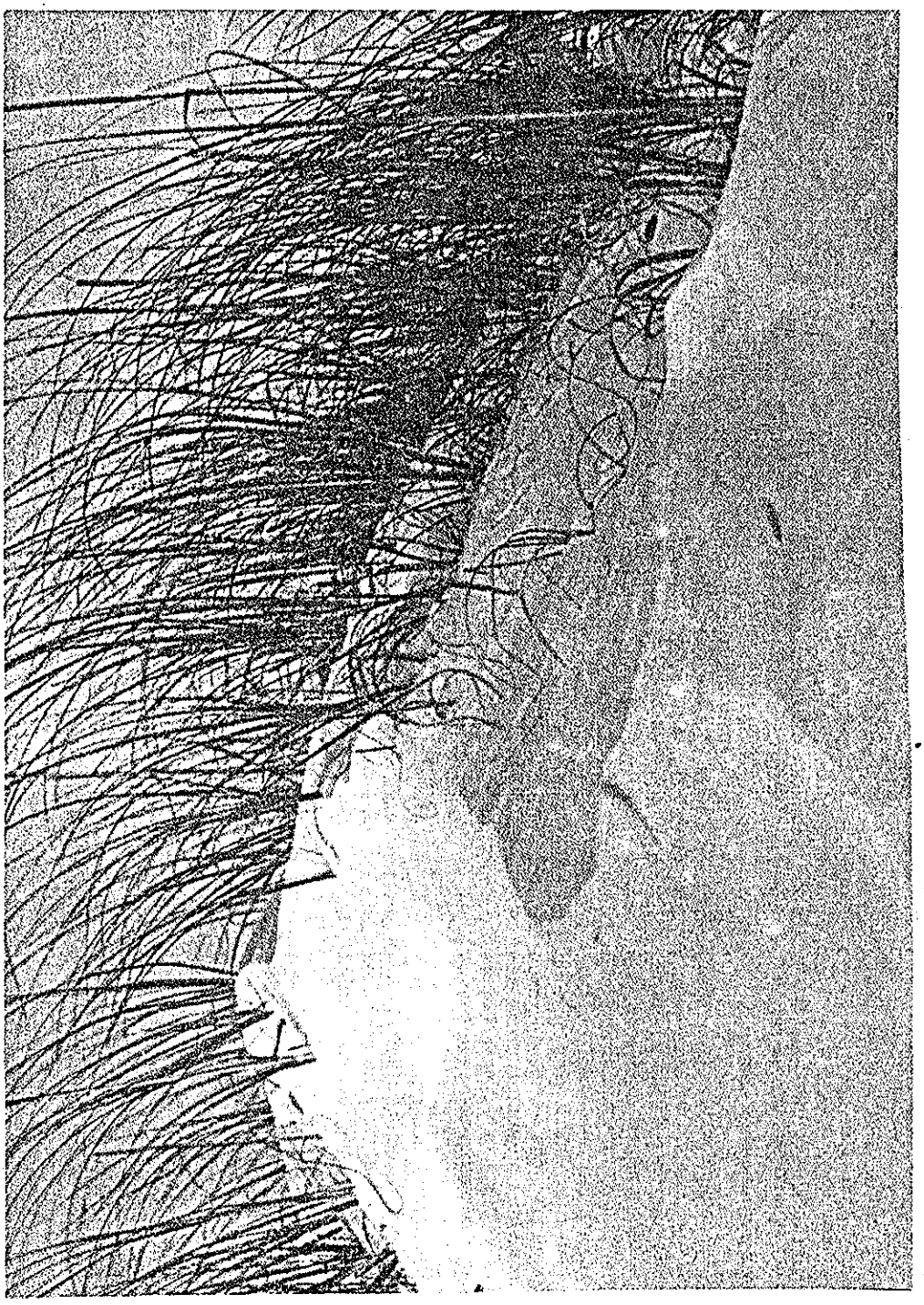

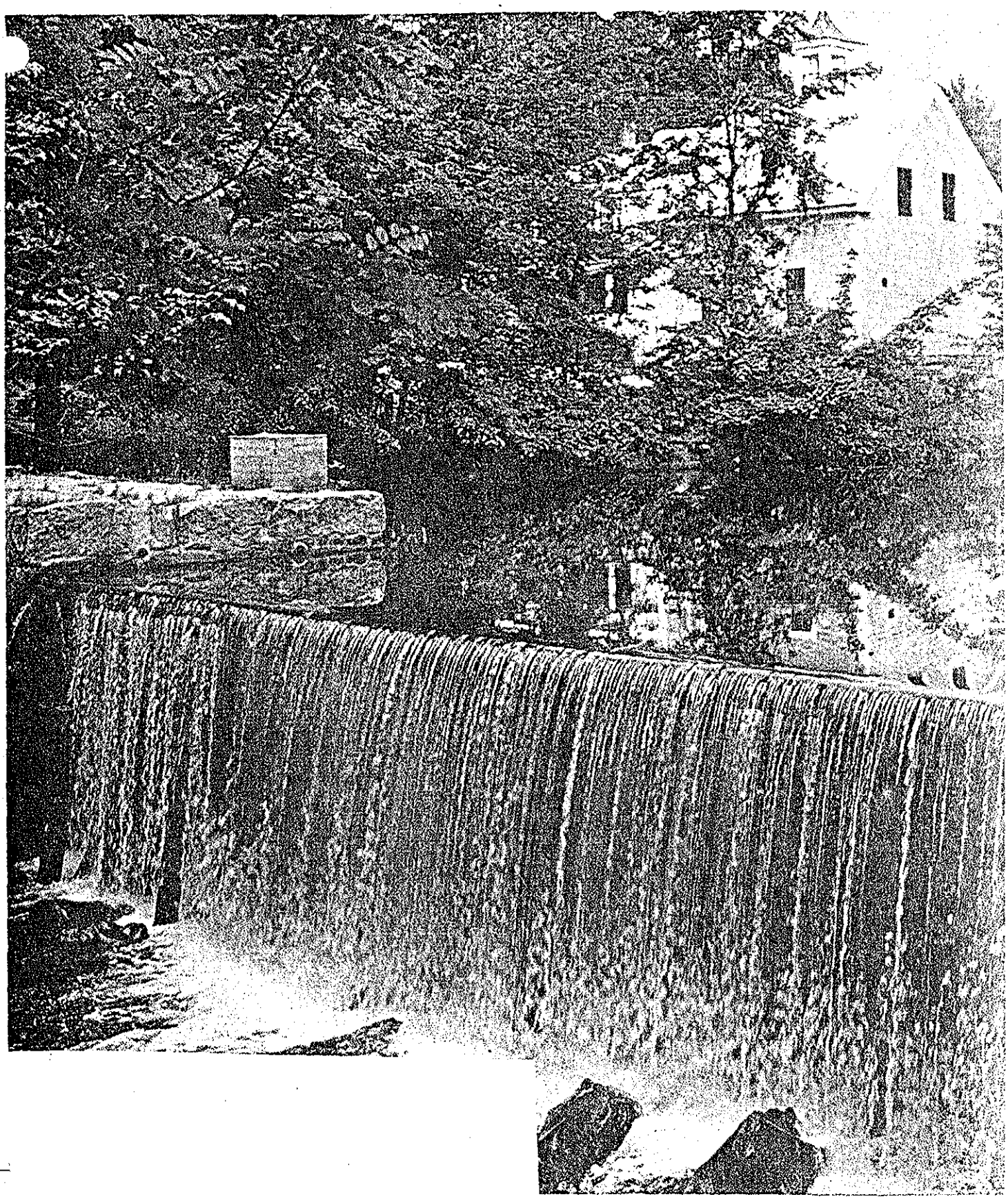

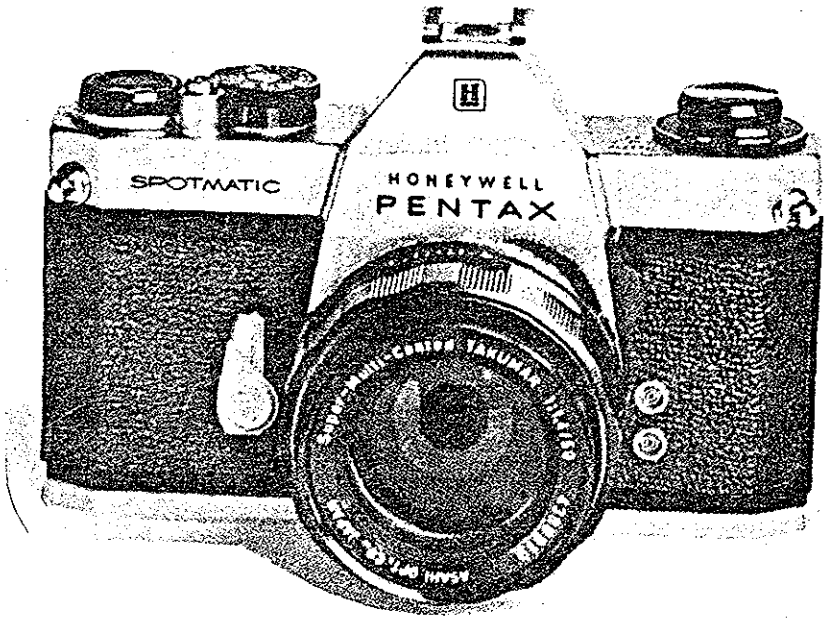
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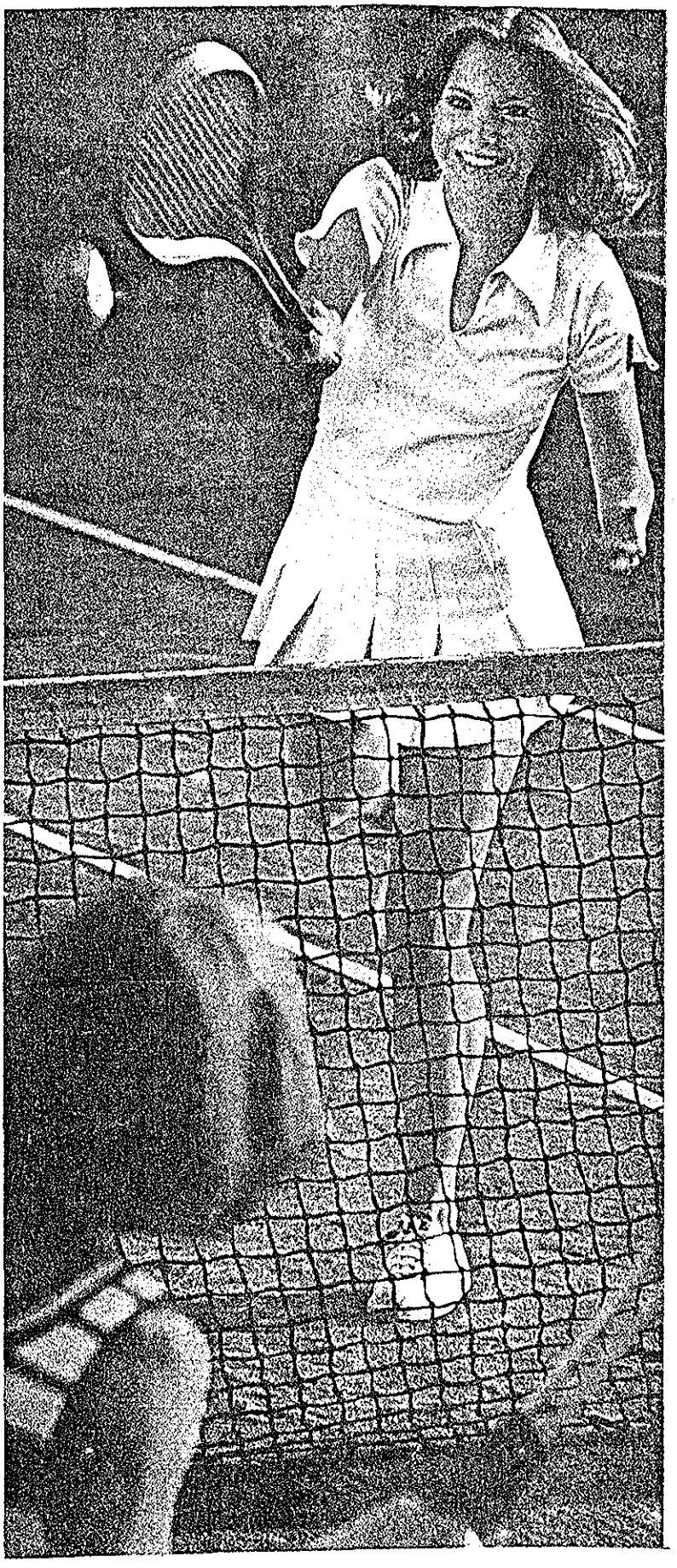
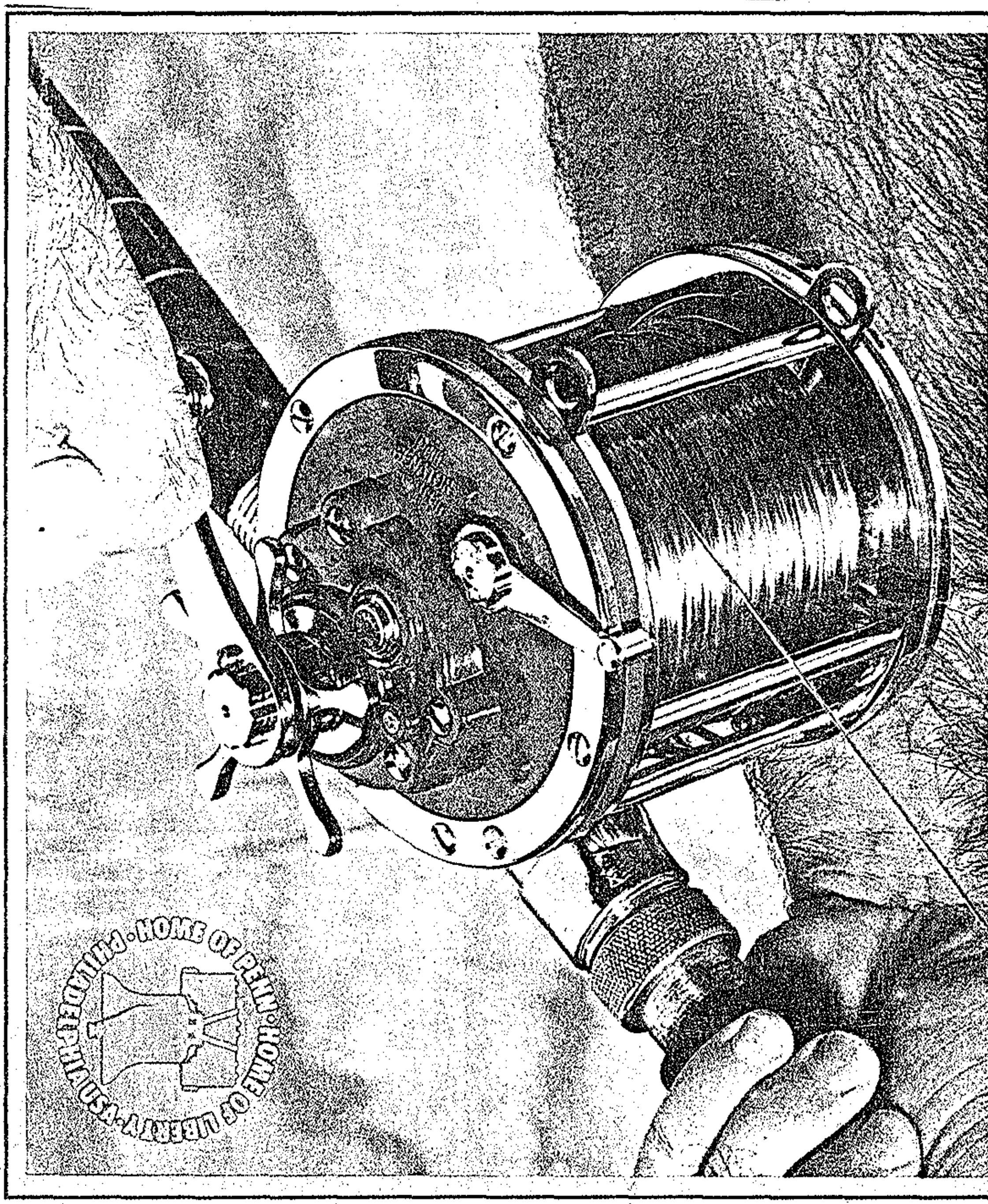
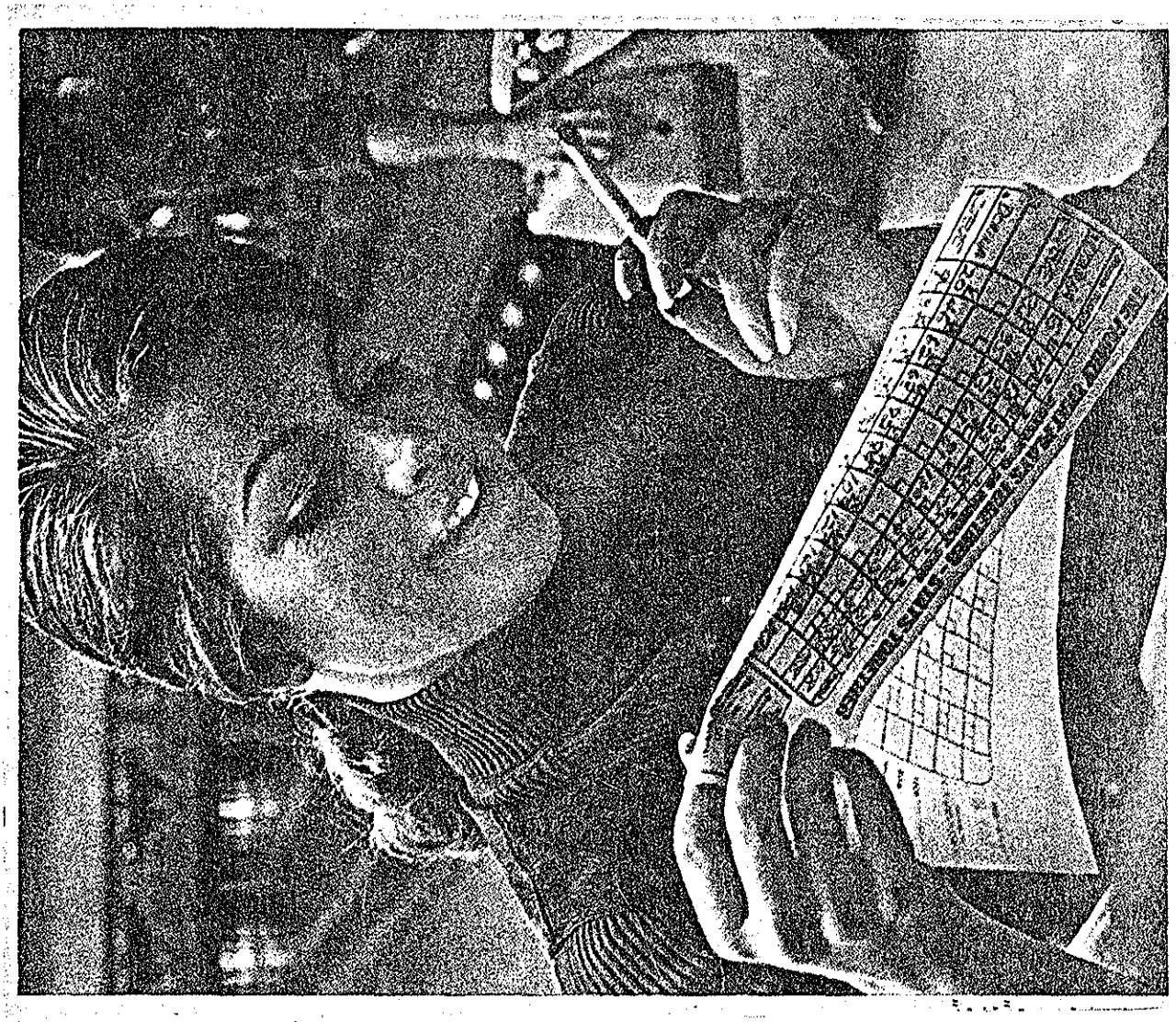
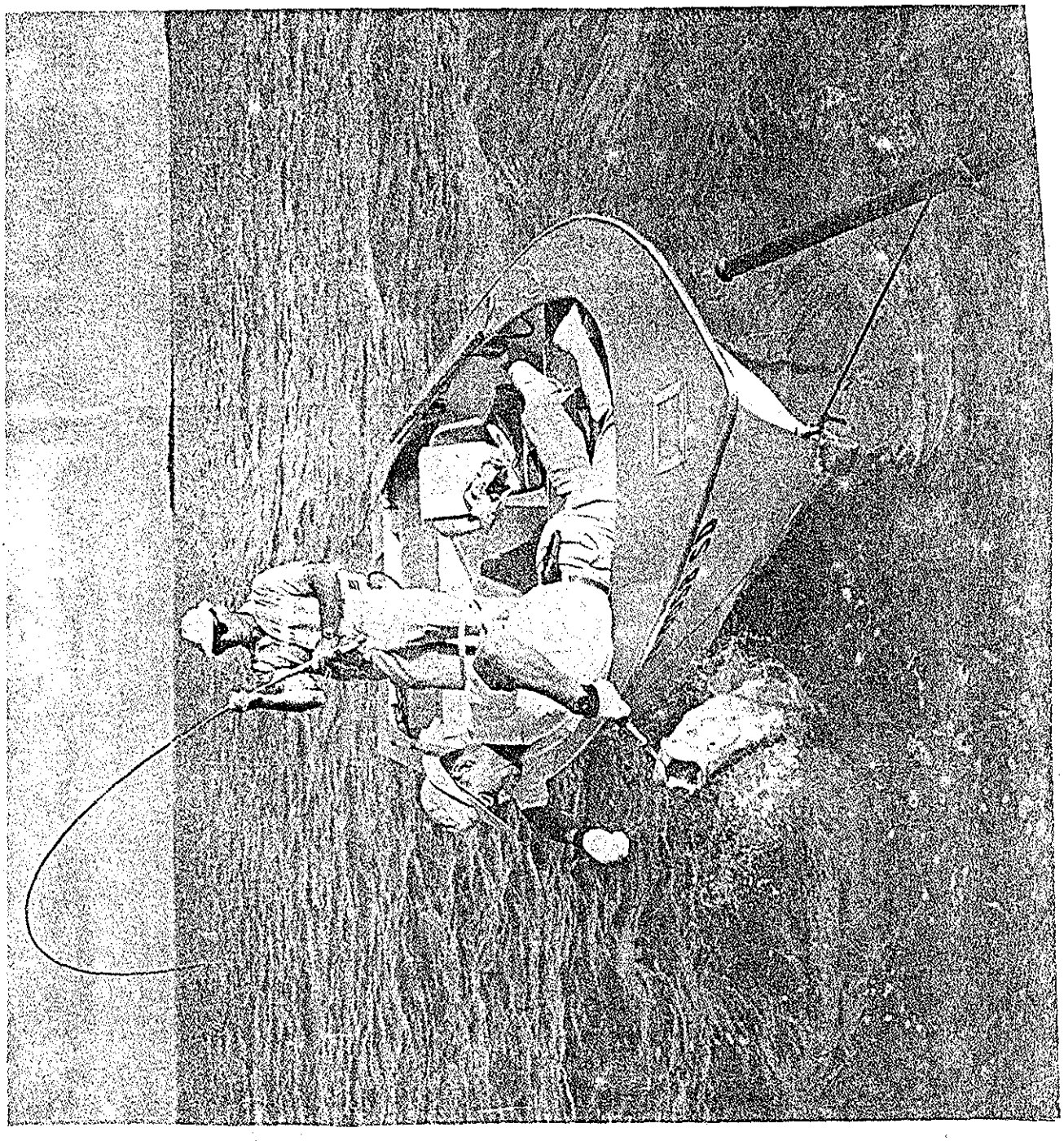
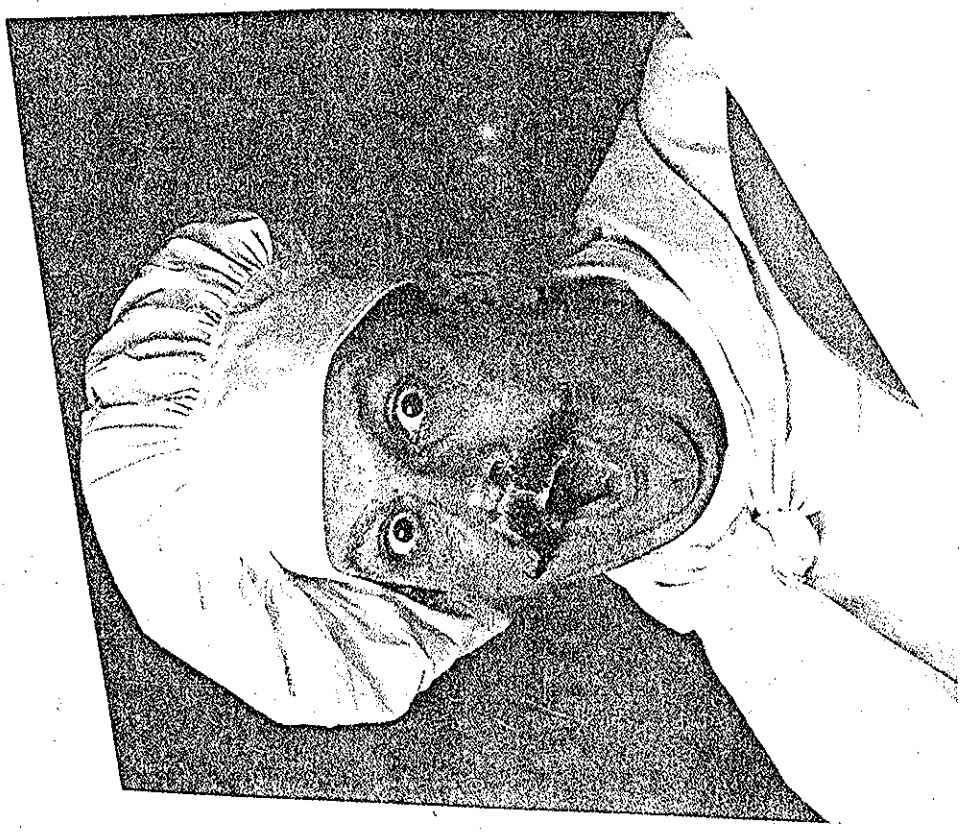
PENTAX

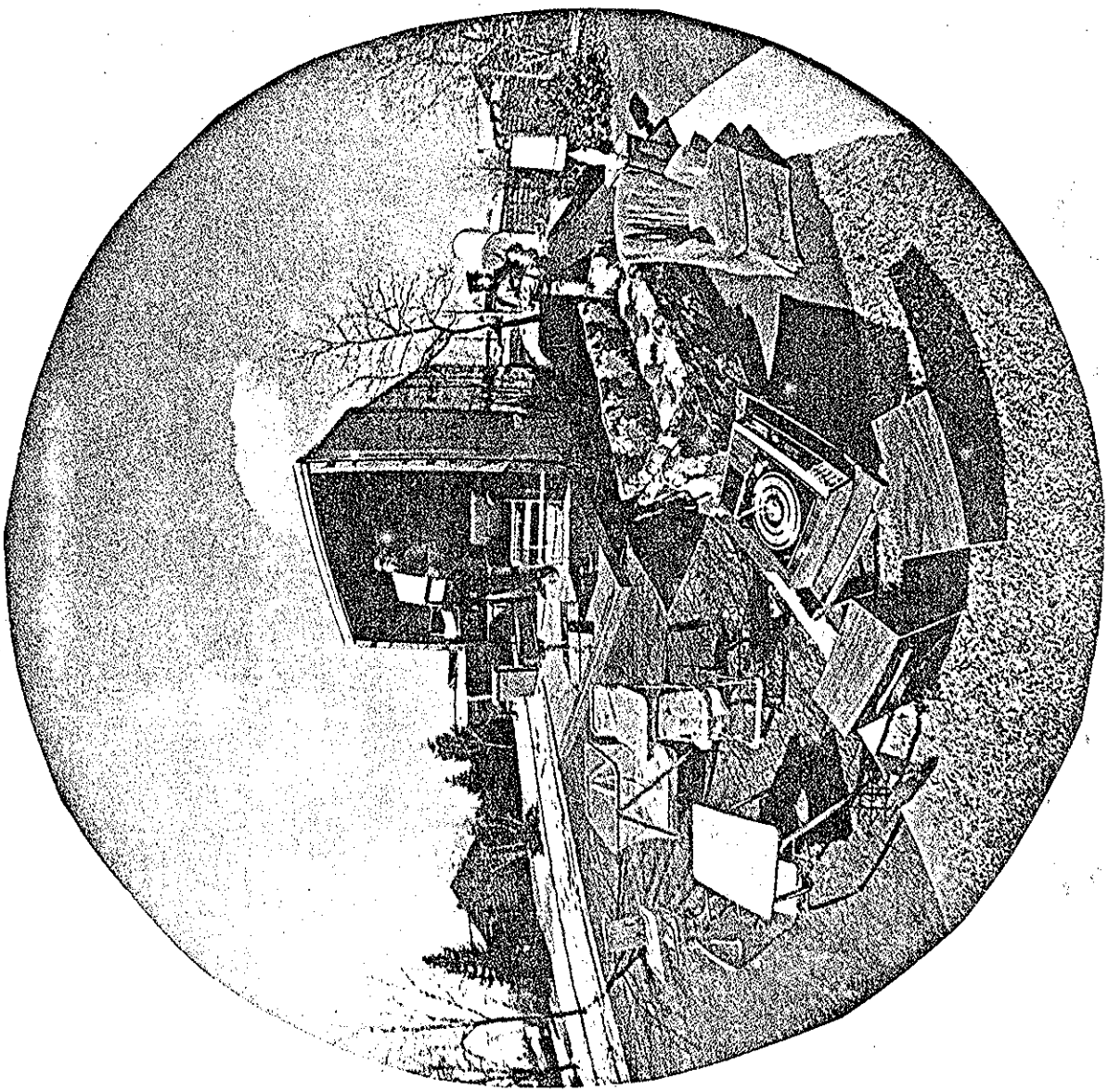


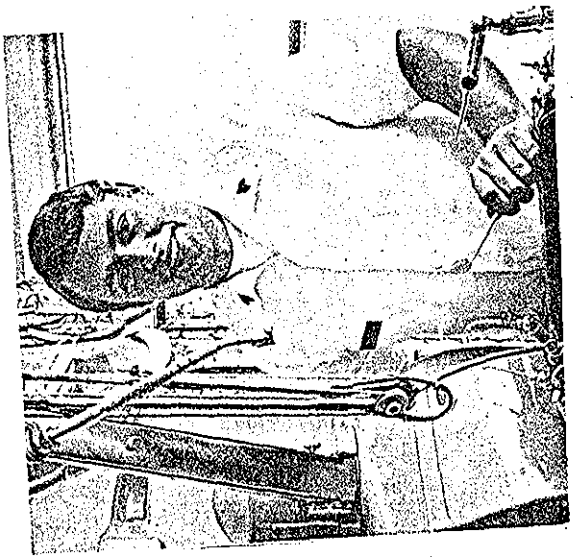


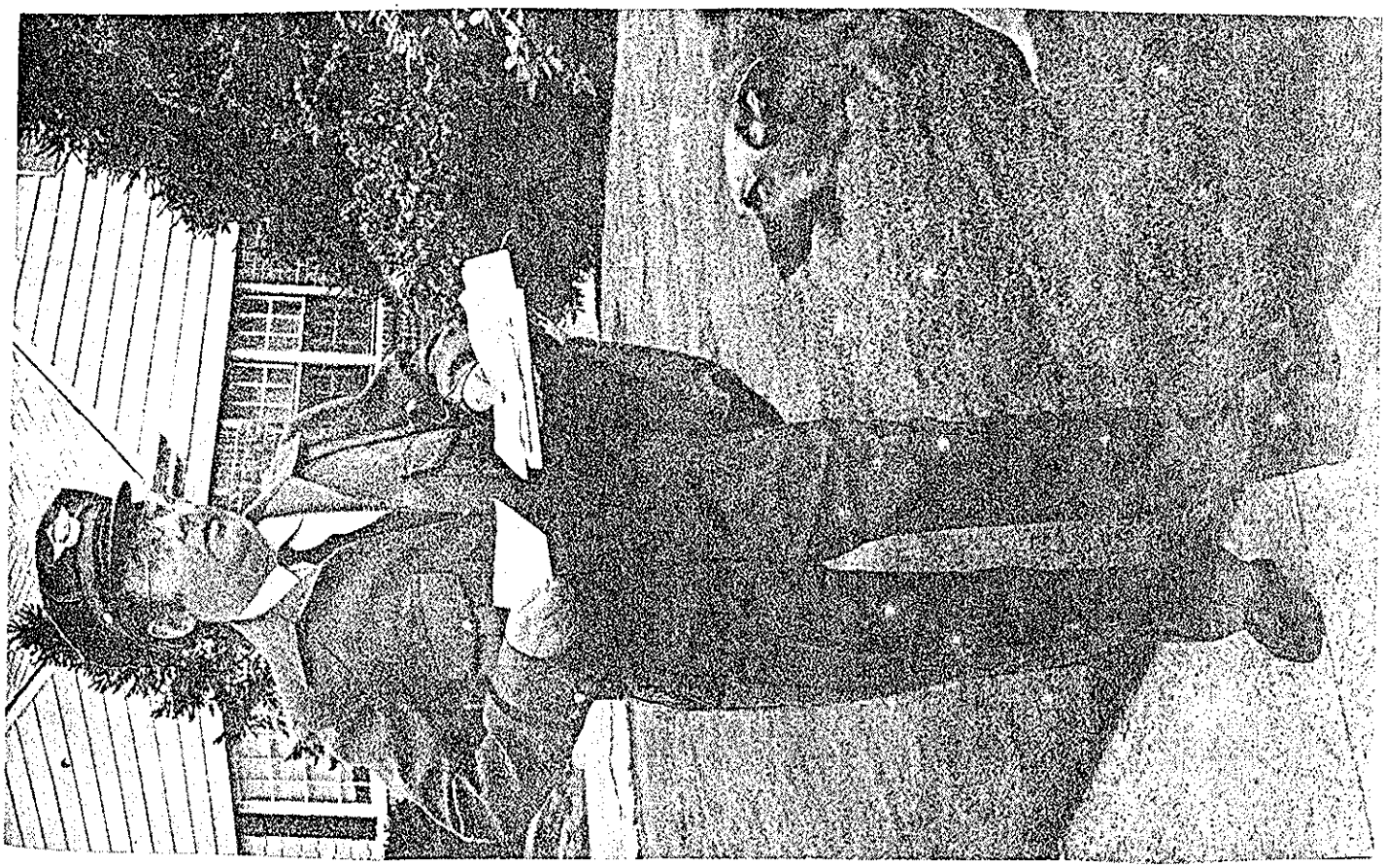


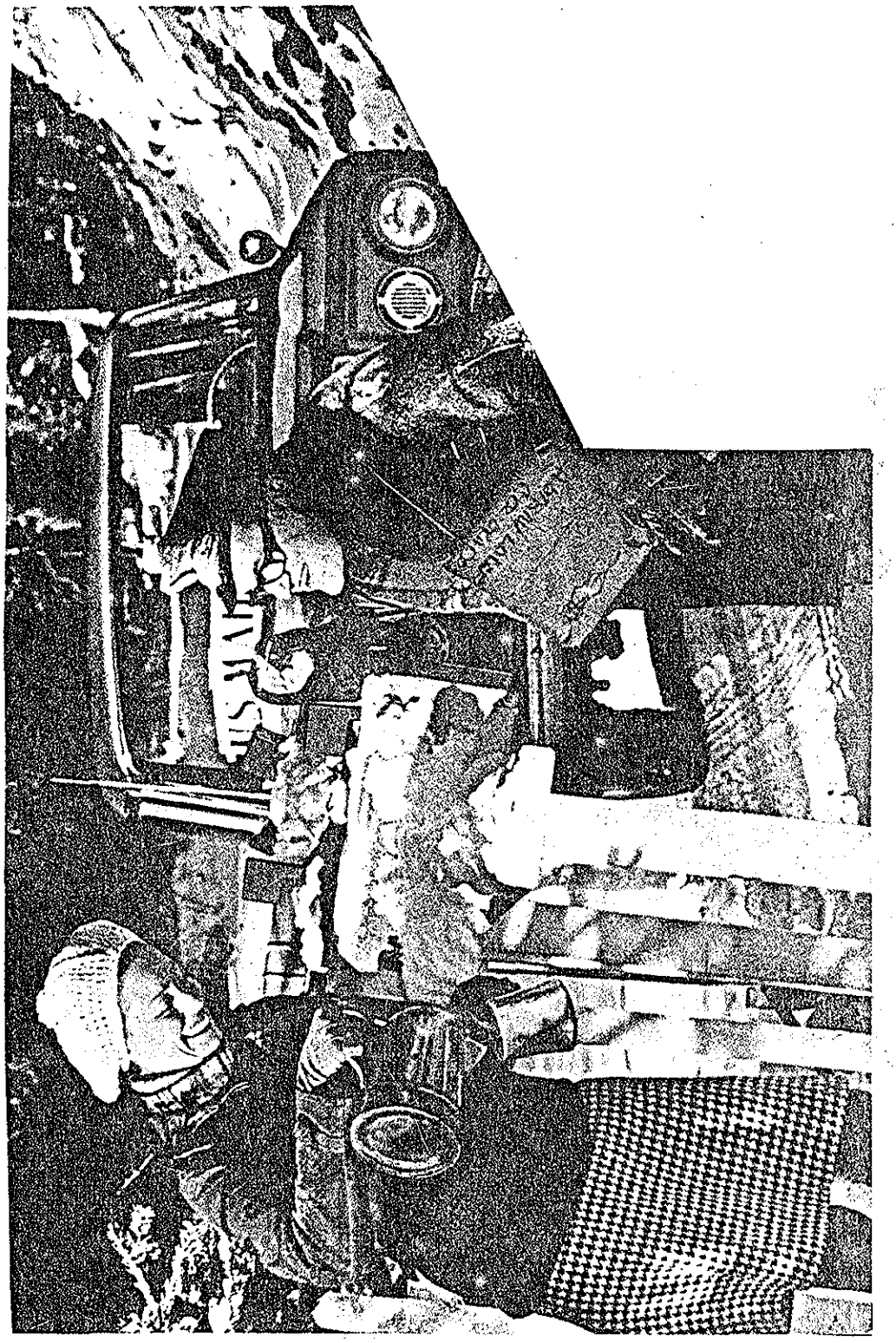


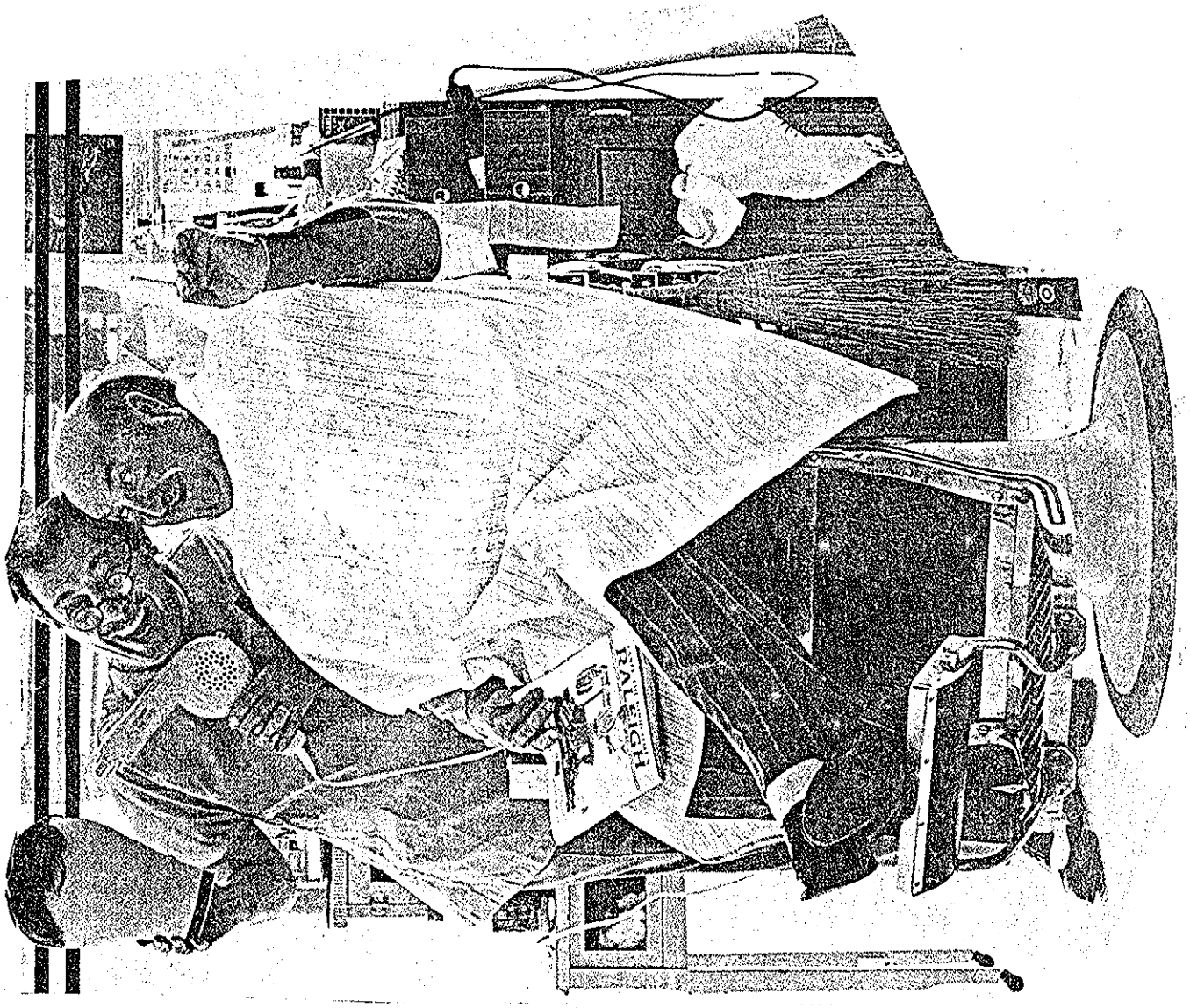








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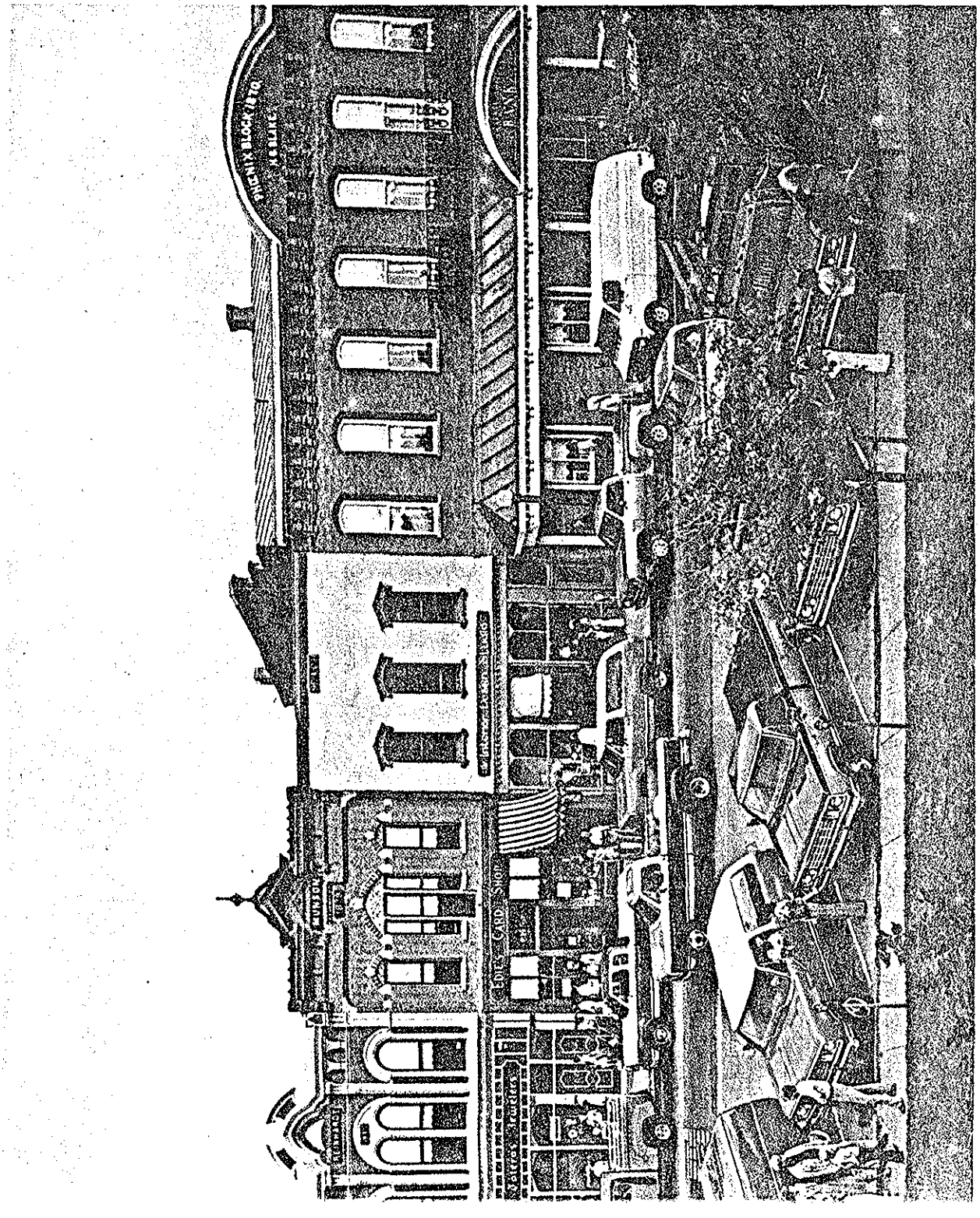
GAS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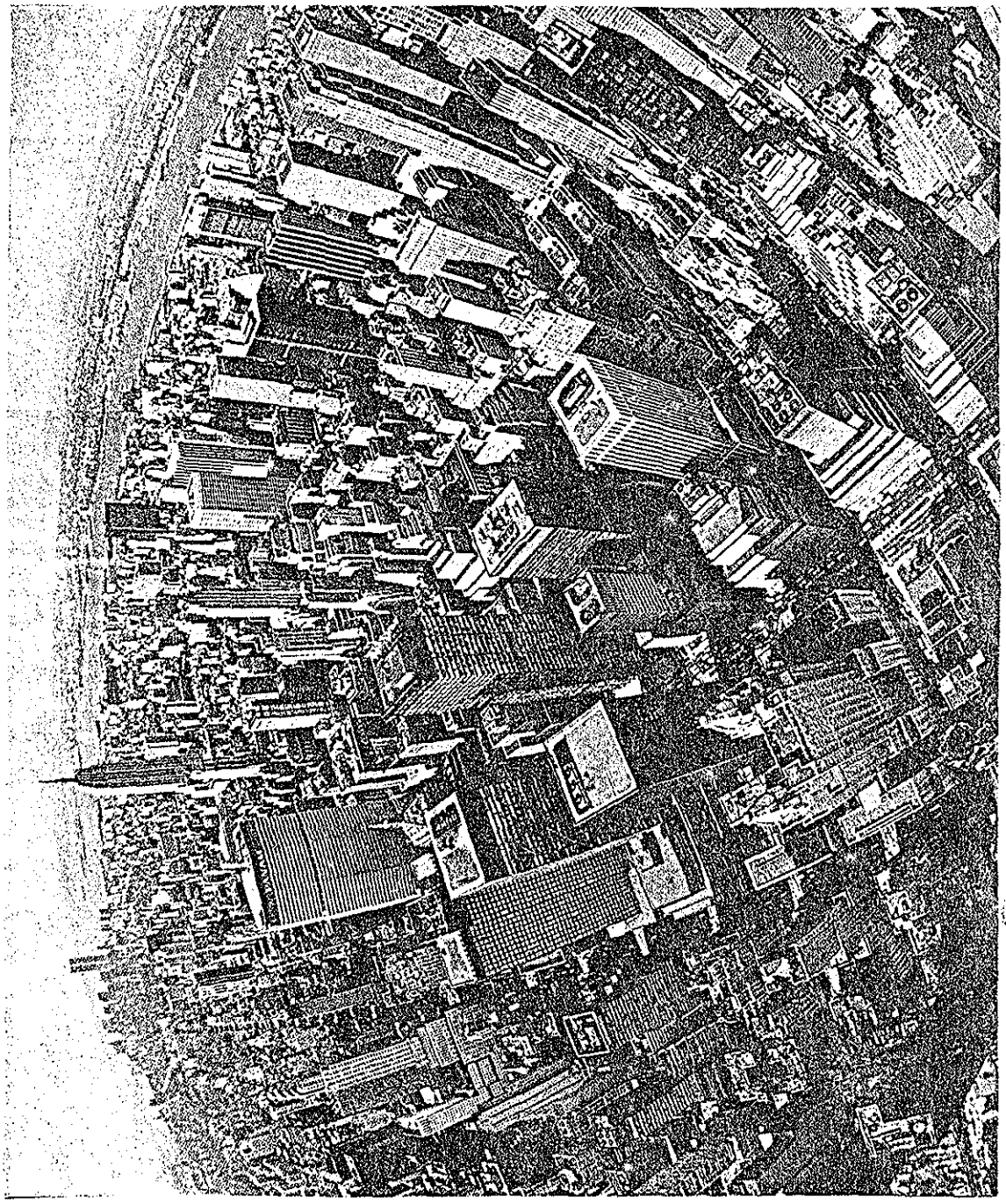
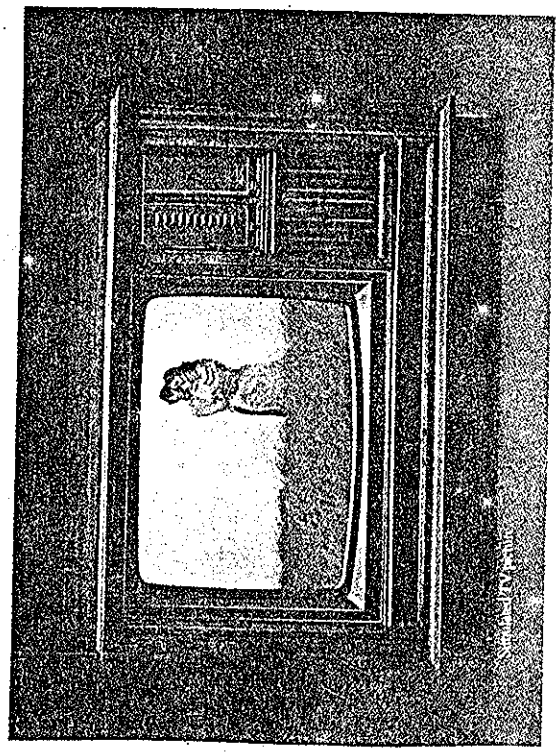
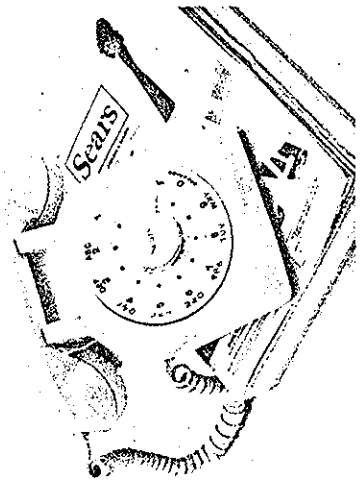
GIFT SHOP





National Hog Farmer
PORK
Farmer
wt Analyzed


THE MADDEN COUNTY NEWS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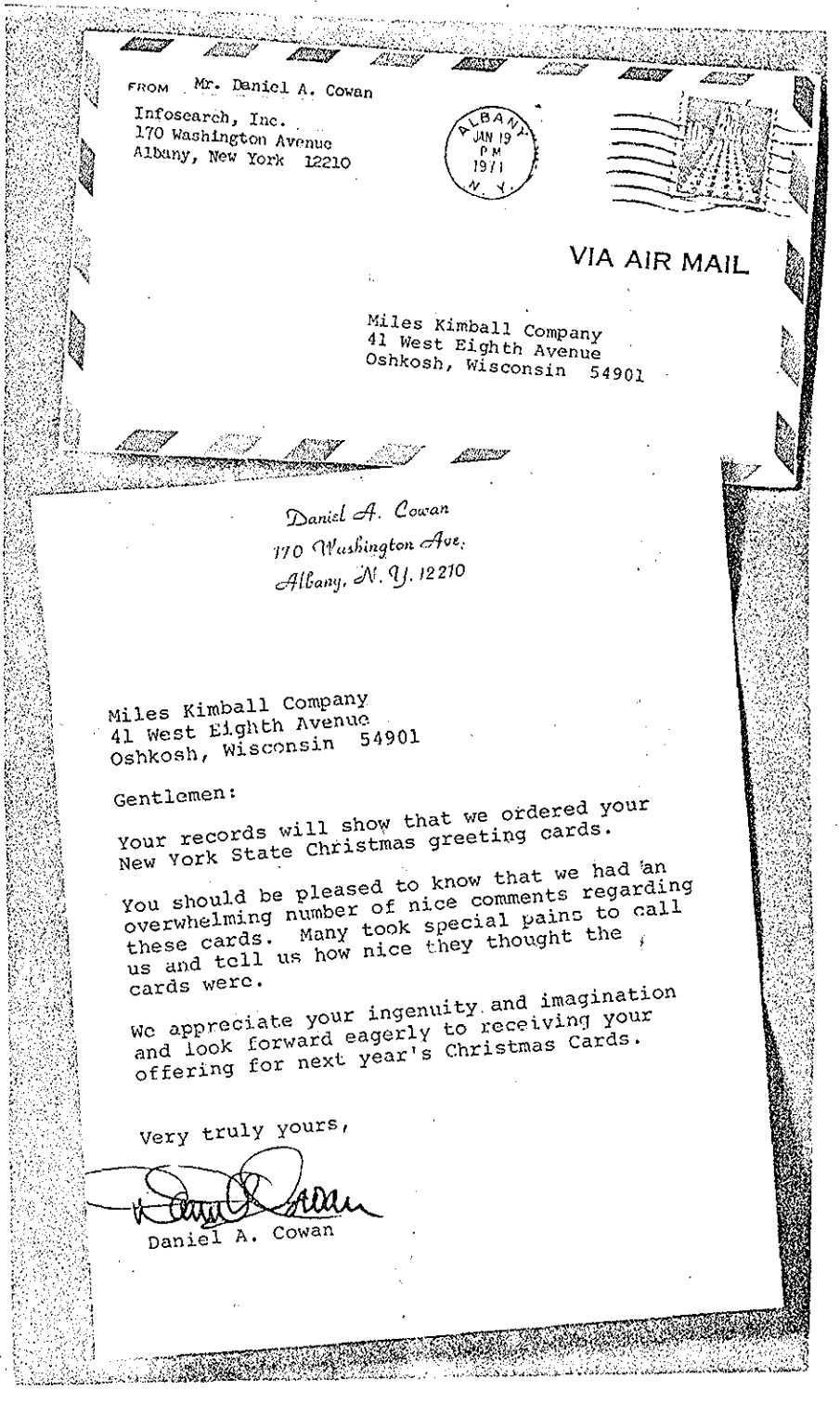


FROM Mr. Daniel A. Cowan

Infosearch, Inc.
170 Washington Avenue
Albany, New York 12210

ALBANY JAN 19 PM 1971 N. Y.

VIA AIR MAIL

Miles Kimball Company
41 West Eighth Avenue
Oshkosh, Wisconsin 54901

Daniel A. Cowan
170 Washington Ave.
Albany, N. Y. 12210

Miles Kimball Company
41 West Eighth Avenue
Oshkosh, Wisconsin 54901

Gentlemen:

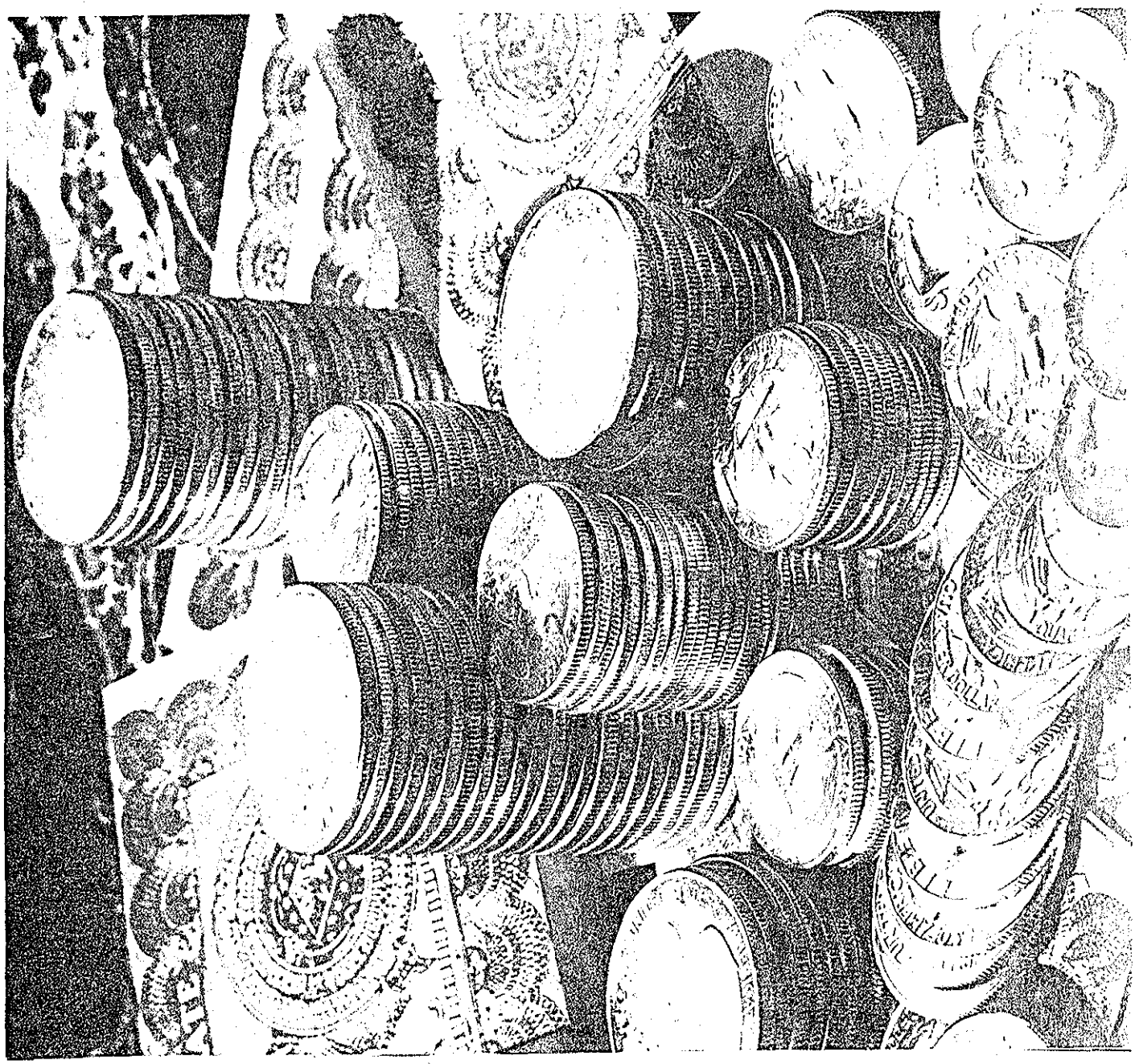
Your records will show that we ordered your New York State Christmas greeting cards.

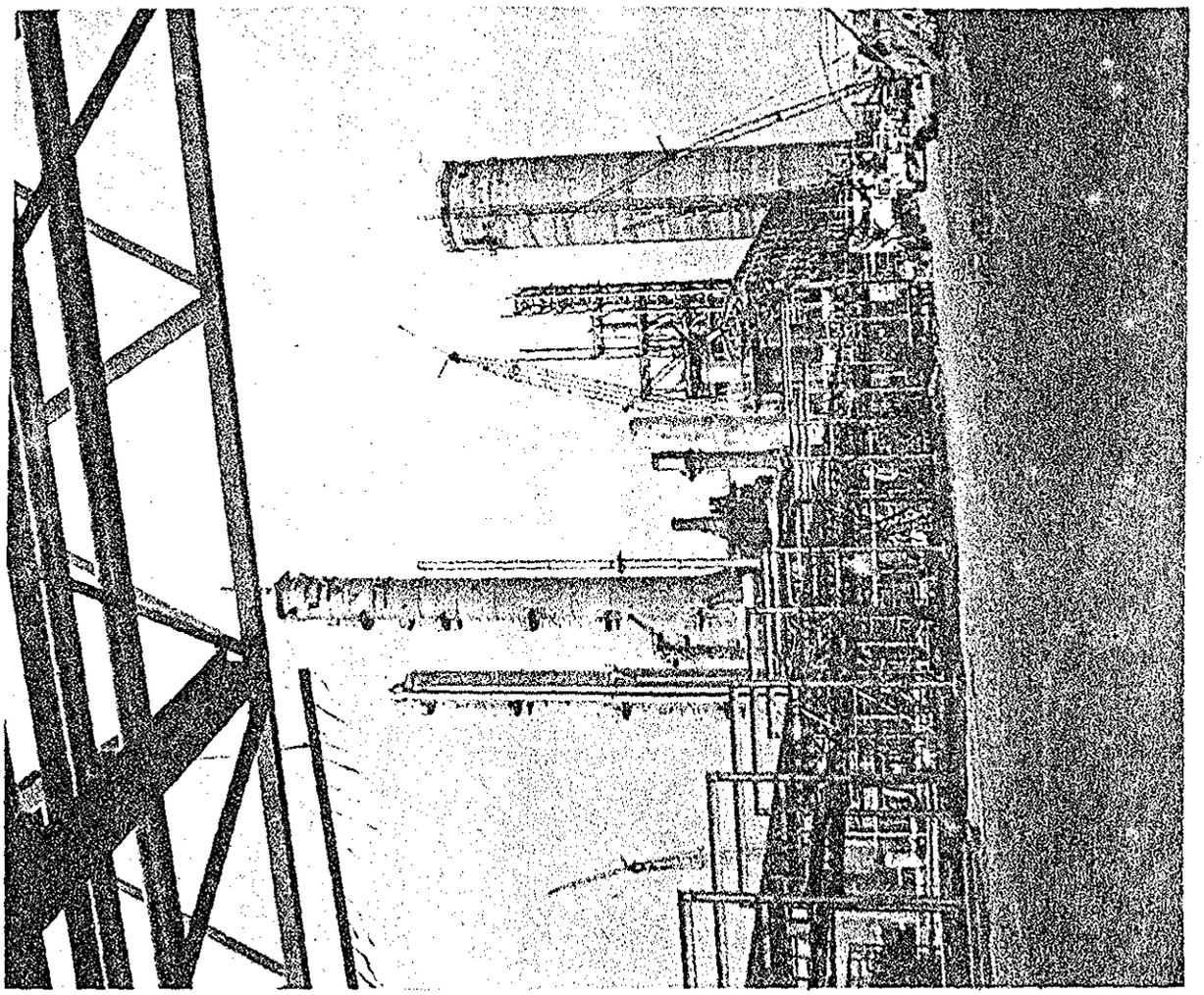
You should be pleased to know that we had an overwhelming number of nice comments regarding these cards. Many took special pains to call us and tell us how nice they thought the cards were.

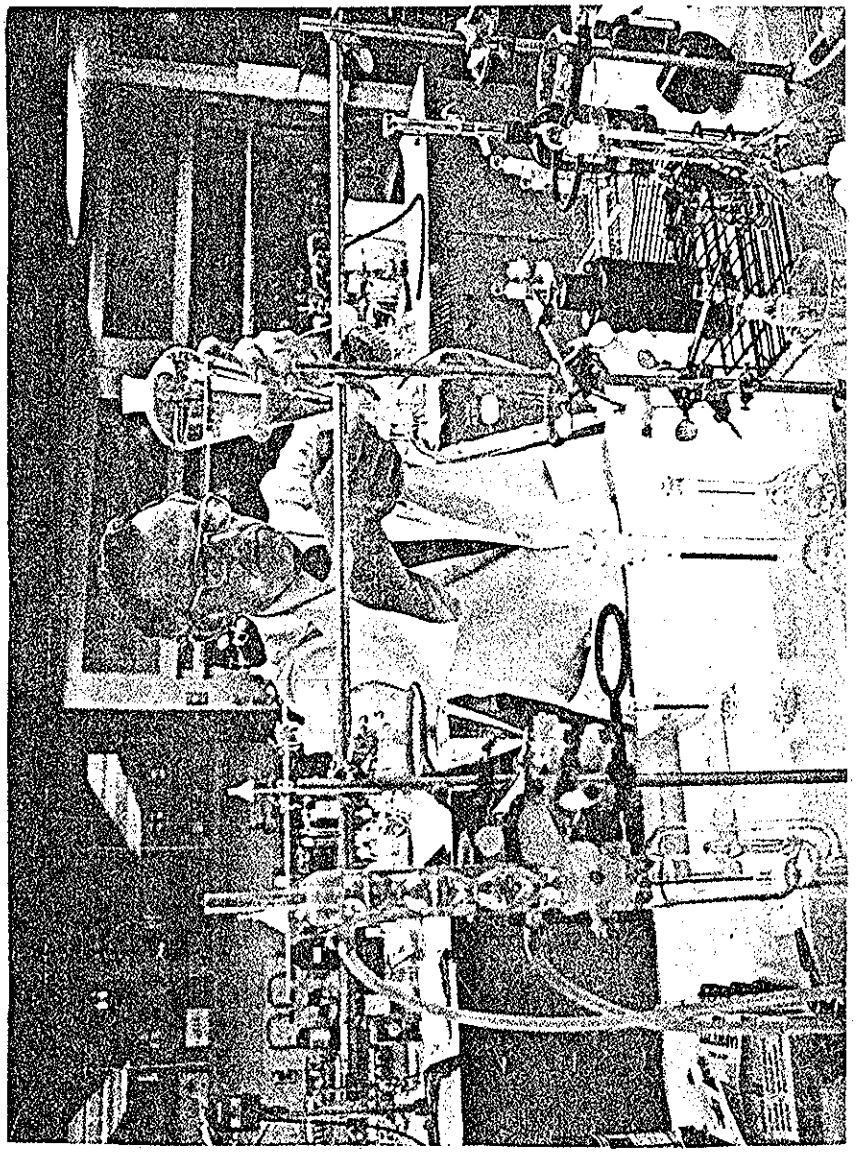
We appreciate your ingenuity and imagination and look forward eagerly to receiving your offering for next year's Christmas Cards.

Very truly yours,

Daniel A. Cowan







APPENDIX H

Results of Research

Test Results

Test Area	Child Number	Research Raw Score	Peabody Raw Score
Wonewoc	1	56	52
	2	66	53
	3	63	60
	4	59	55
	5	63	54
	6	74	64
	7	62	41
	8	58	53
	9	54	44
	10	66	60
	11	73	77
	12	49	48
	13	52	69
	14	63	63
	15	75	51
	16	76	73
	17	56	70
	18	65	59
	19	60	34
	20	68	69
	21	69	45
	22	69	56

Test Results (continued)

Test Area	Child Number	Research Raw Score	Peabody Raw Score
Reedsburg	23	66	54
	24	52	44
	25	45	51
	26	68	45
	27	53	52
	28	48	50
La Crosse	29	61	67
	30	28	46
	31	62	69
	32	60	49
	33	68	83
	34	36	55
	35	52	49
	36	49	59
	37	50	54
	38	48	51
	39	46	55