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PUBLIC RELATIONS? WHO, ME?

Yes—you.

You don't have to be in the public relations department to be concerned in the company's relations with the public.

Whatever your job, the way you do it helps to make up the total impression the company makes on the public.

A faulty piece of work anywhere along the line . . . a poorly typed letter . . . an abrupt answer over the telephone . . . things like these may seem of little account.

But they are bound to affect our relations with the public, offsetting many of the good things we do.

For the fact is that our relations with the public, for better or for worse, depend on the sum total of what the company is—not on an "image" we might like to present.

And the sum total is made up of the thousands of things done by many people in every kind of job.



W HITIN PERSONALIT

EDWARD B. POSTMA, Foreman of Machine Maintenance, has been absent from his work at Whitin only a few half days and no more than two full days in the last 38 years.

He was born in Whitinsville on January 30, 1905 and after attending local schools became an apprentice at Whitin in 1921. From the time he graduated in 1924 until 1945, he worked as a machinist or machine tool maintenance and assisted in building a variety of specia machines used for manufacturing in the plant. For eight months, he instructed Charlotte Shop personnel in the latest methods of machinery maintenance.

For 15 years, Ed was supervisor of machine tool maintenance and in 1960 was promoted to foreman of the department.

In addition to his Whitin training, he attended night sessions at Worcester Boys Trade High School for five years learning drafting shop mathematics and gearing design.

He completed a 14-week night course at Massachusetts Institute of Technology, on lubrication, oils and greases. He finished two extension courses with the University of Massachusetts covering applied mathematics and engineering.

Ed is married to the former Marie Berkowitz, and for the past 22 years they have lived in a home which they had built on Church Street, Whitinsville.

Ed is a member of the American Society of Lubrication Engineers, Boston Chapter, and serves on the Membership Committee. He is associated with the International Maintenance Institute and is a charter member of the Connecticut Chapter. He is a director of the Northbridge Taxpayers' Association and served on the planning board of the Blackstone Valley Regional Boys' Vocational High School.

His hobbies include color photography and salt water fishing. He is an avid reader of non-fiction, takes many automobile trips and is keenly interested in town government.

FRONT COVER: Hunting, like any sport, can be lots of fun provided all safety rules are faithfully followed. Ralph True and wife Judy, who often hunt together, make it a point to follow the safety commandments which have been listed on page 8.

nylon's 25th anniversary spotlights long dupont-whitin relationship

NYLON—first of the truly "man-made" fibers and the one which provided the major push for the sprawling man-made fiber industry—has celebrated its 25th birthday.

The milestone was passed on October 27, a quarter of a century after the DuPont Company introduced, "A new product with a new name—Nylon," to a New York World's Fair preview audience in 1938. The announcement came after what the company says was an investment of 11 years and \$27 million in researching the possibility of creating a fiber from a combination of chemicals rather than from a combination of natural products and chemicals, as is the case with rayon. DuPont's nylon research program was launched in 1928 under the direction of Dr. Wallace Carothers.

In 1937, Whitin started designing what was to be the first operational Draw Twister for processing nylon. In concept and performance this machine was entirely different than conventional processing machinery for natural fibers. For example, the tolerances on the draw rolls and other components had to be held to one ten-thousandth of an inch (.0001''), a degree of accuracy hitherto never required on textile machinery.

Nylon's first commercial uses were modest ones molded plastic type products, also brush bristles



A closeup of a head end section of an early model nylon draw twister

and fishing leaders. Its subsequent utilization as a textile filament fiber created for it its greatest impact on both economy and culture. Its superior qualities for the manufacture of hosiery is known and appreciated by women around the world, but its uses now cover a vast range of apparel, home furnishings, industrial, military and space age products.

The first nylon plant in the world was begun in 1939 at Seaford, Delaware and was equipped with Whitin Draw Twisters. Limited production began in December of that year. A second similarly equipped plant began production in 1941 at Martinsville, Virginia.

Not only did Whitin contribute materially to the early commercial success of nylon but the Foster Machine Company, now a Whitin subsidiary, also designed and developed precision winding equipment which was installed in these first DuPont plants.

From the very beginning, nylon's acceptance was sensational and DuPont was obliged to build many additional Whitin and Foster equipped plants to meet the demand. Today, nylon production has spread to 120 plants, operated by 112 different companies in 38 countries. Whitin and Foster machines are playing an important role in many of them. Approximately one-and-a-half billion pounds of nylon are produced annually, with the United States accounting for about 600 million pounds valued at approximately \$900 million.

Despite its relative "old age" as a man-made fiber, nylon continues to excite textile and fashion experts. In fact, within the past two years, a new wave of popularity for nylon and nylon products has surprised even nylon producers who had began to express disappointment at a lack of new developments of the fiber.

Everyone who had thought nylon would be lost in the shuffle had reckoned without its great versatility. Techniques were developed by textile scientists and engineers to modify the basic fiber's chemical and physical structure. Special types were developed for special needs, and its basic strength and versatility were expanded far beyond original dreams.

One example of nylon's booming development in its 25 years of existence has been the DuPont company's experience. DuPont now produces 44 types of nylon, including 1,200 different variations of the original fiber.



The new Foster-Muller automatic cone winder

WHITIN to assist FOSTER in production of new winder

THE NEW Foster-Muller Automat, the perfected automatic cone winder, developed by Franz Muller Maschinenfabrik of Monchengladbach, Germany and built and sold under license by the Foster Machine Company, Westfield, Massachusetts, is now in production in our Whitinsville Division.

The overwhelming response to this equipment at the Greenville, Knitting Arts and Hanover Exhibitions, together with the enthusiastic reports and reorders coming in from European installations, led management to believe that the peut up demand of the American Textile market would exceed the top production capacity at the Foster Division.

In order to satisfy these demands in the shortest possible time, production facilities of our Whitinsville Division are being adapted to the manufacture of this new product. Responsibility, sales, service, and the engineering of this equipment will remain with Foster and will be under the direction of Foster personnel. The winder will be erected on the Picker floor where conveyors and other modern equipment will be used to expedite the building of this new machine. When production reaches full capacity about onesixth of our labor force will be engaged in making parts and erecting this equipment. The production of parts, which started in the latter part of November, currently is being done in many departments throughout the plant.

The first completed machine in January, will be used by the Foster Company for demonstration purposes. It is expected that the first customer machine will be completed in late February or early March.

This perfected automatic cone winder's contribution to today's textile manufacturer's progress can hardly be over-stated.

Economically it offers the possibility of winding high quality packages at approximately one-fifth the labor cost and three times the winding speed of manual winders.

FERRY Products Mean New Jobs At WHITIN

The J. D. Ferry Company, Harrisburg, Pennsylvania, a Whitin subsidiary, is using some of the manufacturing facilities of our Whitinsville Division to make a variety of units and component parts for their potato chip machines.

As a result of recent orders from J. D. Ferry, the Steel Fabricating Department is presently building 18 weighing hoppers and 28 potato peelers. This department has already completed 7 chutes as well as 7 conveyors which measure in length from 11'-6''to 60'.

Other departments which will be doing some of

this work will be the Duplicator Assembly Department which will build 10 potato slicers and 5 salters.

The machining for all of these units and component parts will be done in Department 411, Planer Job, Milling Job, Chuck Job, Lathe & Grinder Job, Roving Small Parts Department and the Tool Job.

The J. D. Ferry Company, Inc., is the originator of automatic chip making equipment and the leader of the industry. Hundreds of potato chip manufacturers in all parts of the world rely on dependable Ferry machines to produce chips of the highest quality.



Conveyors which move pototo chips from one area to another are from 11'-6'' in length to 60' long and are made also in the steel fabricating department





Potato weighing hoppers ond peelers are mode in the steel fabricating department

Salter and chutes shown connected to frying machine are monufactured in our Whitinsville plant. Chutes are made in steel fabricating department and salters are assembled in the Duplicator assembly area

5

WHITIN RECEIVES "TOOLS FOR FREEDOM" AWARD

NETITUTE OF MUSLIM EDUCATION P. O. BOX 1120 MOMSABA TERCHAR & CALS MIGHE MONSASA TERMONE 4888 ● 🖦 P.5/82 own 3rd September, 1963. Whitin Machine Works, Main Street, Whitineville, Mussachusetts, U.S.A. Dear Sire. We have been informed through the good offices of Toole Freedom that you have very kindly donated ons Spindle Drill, Surface Grinder, Acone Engine Laths to our Institute, which she arrive in Kombase on or about 6th October, 1561. We are no than grateful for your generous gift end are looking forward their arrival. We will find them very useful in our Kechan workshops. rishops. This Institute, as you will see from the smolosed booklet of Provide 1560 - 1550 - a constitute proposed as a dist University by H.H. As Khan, and the should be a should a consideration agreement was reached to estublish an Institute twull Education and the Institute was built in 1551 with serous donations from H.G. Age Khan, N.H. Preserry ad vericus per Kuells councileres. During the smouling years it has a server a state of the server and the server of the server ics, and today our stukents are taking the City and Guide of the institute and the Union of Lanceuring and the siture minations in Mechanical and Electrical Engineering, with increas-guccess. We have operated our doors to non-Kuell studies and a has meant an improved entry with improved successes in all to hare open to students from all racce, and cur evening classes, see numbers compare very favourably with the numbers in our day seen, are non-racial. The institute is providing trained somel for industry throughout Best Africs. on the foregoing you will see that the help we are receiving ols for Freedom in equipping our Mechanical and Electrical pa is invaluable and we are indebted to them and to you for hopa help. We will arrings for publicity in our newspapers when the guipment arrives, and will send you copies of any articles and photographic resulting from this publicity. Yours very truly, Hi Darley_ PRINCIPAL, MOMPAEA INSTITUTE OF MUSLIM DDUCATION. KSG/RLR Copy to: Tools for Freedom. Encl: Review of Programs 1948 - 1958 The Niome Magazine December 1962.

From the foregoing you will see that the help we are receiving from Tools for Freedom in equipping our Mechanical and Electrical workshops is invaluable and we are indebted to them and to you for this help.

Clayton W. Adams (right), Manufacturing Manager, receives plaque from Philip M. Morgan, Choirman of the Tools for Freedom Committee of Assaciated Industries of Mossochusetts. The presentation was made at the AIM Annual Meeting in Boston



The Whitin Machine Works has received a "Tools for Freedom" Award for participating in the unique, private enterprise "people to people" program through which Massachusetts manufacturers and others contribute machinery, equipment and services to aid technical school students in developing countries to become self-sustaining.

The seven used machines, which Whitin contributed to the "Tools for Freedom" program, were shipped to technical schools in East Africa, Colombia, North Africa and Bolivia. The machinery, which included 2 lathes, 2 upright drills, a punch press, a hand miller, and a surface grinder, weighed a total of 10,000 pounds.

The above letter of appreciation has been received from the Principal of the Mombasa Institute of Muslim Education in Mombasa, East Africa. The strongest element in the future prosperity of the individual and the nation ENTERPRISE ... an inseparable part of

The greatest menace to

freedom.

our

freedom is an inert people

Justice Brandeis

TO EACH HIS OWN

No matter how you interpret the Constitutional paragraph that gives "Congress the power . . . to . . . provide for the . . . General Welfare of the United States" it still gives every man the right and responsibility to look after his own.

SHORTER WORK WEEK

Between 1900 and 1930 the average hours worked per week was reduced 13 hours from 56 to 43.

In an era of so-called "social legislation to protect the worker" from 1930 to 1962, the average hours worked per week dropped just 3 hours, from 43 to 40.

Why did hours drop more between 1900 and 1930? For the same reason the average man with a power mower can mow his lawn in half the time it took him 20 years ago—INCREASED PRODUC-TIVITY with MORE EFFICIENT EQUIPMENT.

STEADY PROFITS, STEADY WAGES

Samuel Gompers, early leader in the United States labor movement, said "The greatest crime a business can commit against its employees is to fail to make a profit."

Profit, therefore, deserves the protection of every wage earner. Only with sound continuing profits can an employer attract the investment capital to provide efficient modern tools to help his employees produce high quality, low-cost goods.

Only with high quality, low-cost goods, can an employer attract sufficient customers to produce continuing profits and assure steady wages.

ONE IN SIX ADULT AMERICANS A STOCKHOLDER

American wage earners have a big share in the free development of American business. A census of share owners reveals that one out of every six adult Americans is a stockholder, compared with one in 16 ten years ago. Another 120 million Americans are indirect stockholders through the ownership of life insurance policies or savings accounts.

The capital that supplies the muscle for America's economy spreads profit to millions of American wage-earners.

But do Americans understand Capitalism?

Indianapolis youngsters found that many do not. High school seniors recently asked 100 people, selected at random "What is Capitalism?"

Six people gave good answers and six more showed a glimmer of understanding of the subject.

Some of the answers:

Four teachers (!): "I don't know."

Store owner: "Capitalism is only for big business."

Average worker: "Capitalism is big business and big money."

BIG-BIGGER-BIGGEST

Despite the fact that many people have an uneasy distrust of anything big, our Federal Government is the biggest spender, the biggest employer, the biggest property owner, the biggest tenant, the biggest insurer, the biggest lender and the biggest borrower in all the world . . . and we find a growing impatience on the part of many holding high office in our land to make government even bigger.

TO PROVIDE ONE JOB

Creating just *one* job in industry requires an average investment of \$17,600 in necessary plant and machinery. Only profitable companies can attract savers and investors to help them expand and create new jobs.

Just to provide steady jobs a company must constantly re-invest its profits in new machinery and equipment. In a recent survey the New York Telephone Company found that, out of 50 businesses, the 25 most profitable had *increased* employment 11 per cent between 1958 and 1961. The 25 less profitable companies had a *drop* in employment of 17 per cent during the same period.

And, incidentally, the people who invest the \$17,600 for new machinery get less return on their money than the employee who uses it.



HUNTING game during the fall and winter months is a favorite pastime for many Whitin people but unless extreme caution is used at all times serious accidents can occur.

Demonstrating the right and wrong ways to handle firearms while hunting are Bob Fougere of the Traffic Department and Arthur Jones of the Order Administration Department.

When using firearms avoid accidents by practicing these common sense cautions:

1. Treat every gun with the respect due a loaded gun.

2. Watch that muzzle! Carry your gun safely; keep safety on until ready to shoot.

3. Unload guns when not in use, take down or have actions open; guns should be carried in cases to shooting area.

4. Be sure barrel is clear of obstructions, and that



When loading o gun you should never have it pointing ot onother person

DO

Always point the gun away from other persons while loading

you have ammunition only of the proper size for the gun you carry.

5. Be sure of target before you pull trigger; know identifying features of game you hunt.

6. Never point a gun at anything you do not want to shoot; avoid all horseplay.

7. Never climb a tree or fence or jump a ditch with a loaded gun; never pull a gun towards you by the muzzle.

8. Never shoot a bullet at a flat, hard surface or water; at target practice be sure your backstop is adequate.

9. Store guns and ammunition separately, beyond reach of children.

10. Avoid alcoholic beverages before and during shooting.



When going over a wall or through a fence you should not carry your gun across of the same time



When climbing over o wall first lay your gun carefully on a flot surface of the wall or hand it to o companion

EXERCISE DAILY ENJOY LIFE ^{by} Harold Case



Mrs. Louise Lash, left, instructing a group of women in colisthenics

What you see here in these two pictures are some individuals who believe in physical exercise and are doing something about it. I will agree that once a week at the Gym won't accomplish wonders but, the secret is to spend a little time each day going through some of the exercises that are given on the floor. The Canadian Armed Services have published a booklet with a series of graded daily exercises and for the women only eleven minutes a day are needed and fifteen for men. That's less time than it takes to fix your hair, or shave, or polish nails, iron a blouse or even shine a pair of shoes. All these things are done to make a presentable appearance so why stop there? Sure, a little more effort is needed to get in shape, but you reap the reward.

Sometimes, it seems that people cannot really see the forest for the trees. By that is meant that many more persons from outside of this locality are using the Gym facilities each year and without exception practically everyone says "I wish we had something like this in our town." People nearby take it for granted. This past summer there were a great number of car pools bringing youngsters to the Gym for swimming lessons. One group traveled from Westboro and seldom missed a day. Upton was well represented and Milford could have supported a bus route. Hundreds of local boys and girls attended swimming classes also, but a lot of them will not be in throughout the winter on a regular basis and that is a big mistake. Once an individual has learned to swim the skill is always there but unless used there is no improvement. If you are a parent make every effort to have your young swimmer pay regular visits to the pool.

The Gym has something for almost everyone though the emphasis is on Gym floor activities and swimming. There is dancing instructions for Junior High students. There is roller skating for all ages and it would be pleasing to see more adults skating. A camera club is being re-activated and if you are interested get in touch with Walter Departie. Art classes for adults meet on Wednesday evenings with Fred Demars instructing. There is a program for those who shun physical activity, or who should not be too active physically. Scuba classes will start in the fall and here is a chance to learn this fascinating sport and one which is growing almost as fast as recreational boating has done in the last five years or so.

What suits your fancy? Call CE 4-2349. You will fit in somewhere!



Mrs. Clare Stuart gives swimming instructions to beginners while others participate in the popular fifty-mile swim, a Red Cross physical fitness program

ONLY BY PEOPLE...

Productivity means a lot more than man-hours and output.

True, we measure productivity by man-hours in relation to goods produced. But this is too simple a device to tell the real story of productivity.

Along with man-hours, the making of a good product requires materials of high standards, the best machines, equipment and methods.

Many other factors make up the "in puts" that go into productivity. Even the weather can be a factor!

The most important single ingredient in productivity is *quality performance*. You can take all the other things that go into productivity and they still may not add up to a salable product—without the indispensable factor of quality.

And quality can be supplied only by people.

Hallmark of quality: originally, the official mark stamped on gold and silver articles at Goldsmiths' Hall in London to attest their purity.



Honor Roll

November-December



Burnham R. Caak Plant Engineering 30 Years



Eugene Closson Praduction Processing 30 Years



Harry E. Drinkwater Aanufacturing Manager's Staff 30 Years



Kenneth H. Macamber Spindles 25 Years

25 Years

Rita Baillargeon, Order AdministrationM. Doris Blouin, Treasurer's Office

20 Years

Noel Arel, Milling
Anthony J. Campo, Large Planers
Albert Cupka, Flyers, Rov. Spdls., Cover. & Clear.
Harry Czerkowicz, Chucking
Douglas A. Farley, Chucking

Rene Guilbert, Packing, Shipping & Receiving

Edward J. Magiera, Large Planers Doris O. McCray, Steel Cut-Off and Storage

Joseph F. Novack, Jr., Top Rolls Earl T. Racicot, Traffic

Elwin L. Salley, Milling

15 Years

Mary E. Anderson, Mfg. Production Engineering

Herbert Ashworth, Jr., Manufacturing Standards

Marilyn R. Blair, Manufacturing Standards

Ann Cupka, Production Stores

Helen Dagirmanjian, Production Manager's Staff

David A. Demarais, Plant Security

Thomas R. Gilchrist, Outside Erecting Herman R. Hathaway, Steel Fabricat-

ing & Tin Cyl.

Joseph M. Kostka, Customer Demonstration & Fibre Lab.

Philip A. Parks, Heat Treating

Charles H. Peix, Industrial Relations

Catherine Reeves, General Accounting

Edward Reeves, Mfg. Production Engineering

Paul S. Wheeler, Mfg. Production Engineering

Donald F. White, Sr., Manufacturing Manager's Staff

10 Years

Marion A. Hutcheson, Product Engineering Francis R. Scott, Power House

5 Years

Dorothy I. Albin, Data Processing
Henry N. Boudreau, Tool Room
Helen W. Burroughs, Production Processing
Gertrude M. Crawford, Purchasing
Barbara A. Dodge, Data Processing
Gloria W. Rauth, Office Management

PIONEERS IN TEXTILES



COUNT HILAIRE DE CHARDONNET

For a number of years, scientists had been looking for ways to produce artificial fibers, but Count Hilaire de Chardonnet, a Frenchman, was the first to succeed in producing one commercially.

De Chardonnet began his experiments in 1878, and in 1882 produced "artificial silk" made from a pulp of mulberry leaves which was coagulated or made solid by heated air.

At the Paris Exposition in 1889 he exhibited articles made from these artificial fibers. Much interest was shown in this manmade fiber and the Count secured enough financial backing to build a factory at Besancon, France where first commercial production began in 1891. Thus De Chardonnet today is recognized as the father of rayon, the forerunner to the great number and wide variety of manmade fibers in use in the textile industry today.



The key of chemical spinning is the spinnerette -a thimble- sized platinum device containing fine holes which range from 2/1000 to 5/1000 of an inch in diameter.



Each hole in the spinnerette forms one filament or strand and all filaments from one spinnerette combine to make a strand of yarn.



Workers are killed more often in accidents off the job than on, according to the National Safety Council. It says 31,800 workers lie annually off the job as compared with 14,200 on-the-job accilental deaths.

Jest a Joke

"How long did you know your wife before you were married?" "I didn't know her at all . . . I only thought I did."

* * *

After saying his usual bedtime prayers, little Johnny was heard shouting out this petition:

"And, dear God, I pray that I will get a new bicycle for my birthday and an electric train for Christmas, if it isn't too much trouble."

"What are you shouting for?" asked his mother, "God isn't deaf."

"I know," said little Johnny, "But grandma is!"

* * * In December his name is Santa.

In December his name is Santa. In January it's Bill.

He could not have been over four, the little boy who stood in front of the lost and found desk during the Christmas rush. There were traces of hastily wiped tears on his chubby face, as he inquired, "Has any mother been turned in yet this morning?"

* * *

The caddies in golf tournaments, according to Gary Player, top pro, often become like fight managers. After one tournament his caddy was asked what had happened, and Player heard him say: "We took a par 4 on the first hole, then we made two birdie threes. We made pars on the next four holes, but then on the eighth hole Mr. Player blew up and took a lousy seven!"

The professor's wife decided to raise some fancy chickens as a hobby. She didn't have good luck.

* * *

Finally someone told her that Congressmen distribute free information about farming so she wrote this letter:

"Dear Sir:

"Every morning I find one or two of my prize chickens lying stiff and cold upon the ground with their legs in the air. Would you be kind enough to tell me what is the matter?"

A few days later she got this reply:

"Dear Madam:

"Your chickens are dead."

* * *

"Do you," the judge asked the groom, "take this woman for better or for worse, through sickness and health, in good times and in bad, whether she be . . ." "Darn it, Judge," broke in the bride tearfully, "You're gonna talk him right out of it!"

* * *

During a recent heat wave, a church in a small southern community featured this comment on its bulletin board: "You think it's hot here?"

* * *

A man had been tormented for years by nightmares. Whenever he went to sleep, he dreamed that grotesque animals and reptiles were rushing in and out from under his bed. Finally he told a friend that he had been cured.

"I told my brother about it," he said, "and he stopped it."

"Is your brother a psychiatrist?"

"No, he's a carpenter," the man replied. "He sawed the legs off my bed."

News Roundup

WHITIN OFFICIAL COMPLETES NISA PROJECT IN WASHINGTON

Mr. George P. Putnam, Chief Manufacturing Engineer at the Whitin Machine Works, recently completed his duties as a member of the Evaluation Committee of the National Industrial Security Association.

In February 1963 the NISA was invited by the U.S. Army Matériel Command (AMC) to review the quality assurance organization, policies, procedures and practices of the AMC to insure that its products fulfilled the mission established by the Department of Army with optimum economy. The 9-month study began on February 6.

One hundred and sixteen (116) professional quality control experts from 100 major American industries participated on a voluntary basis in the program. Divided into 11 task teams these men visited AMC command positions throughout the nation to observe the AMC quality assurance system at work.

Rolph ond Glodys George received quite a surprise when the guests they invited for dinner on Thanksgiving arrived at their cottage on Cape Cod dressed in the spirit of the first Thonksgiving. Mr. Ganter, pictured with daughter Marcio, son Donald and Mrs. Gonter, is Ralph's brother-in-low Mr. Putnam played a major role in coordinating the committee's findings and conclusions and in organizing its final report identified as "Operation Evaluation Program" which was submitted to Lt. Gen. Frank S. Besson, Commanding General (AMC) and his staff at the Army-Navy Club in Washington, D.C. Accompanying the reading of the report was a graphic presentation of its highlights, findings and recommendations.

Mr. Putnam's broad background of experience in quality control work was gained through his affiliation with Curtis Wright Corp., Westinghouse Electric and Mack Trucks, Inc. prior to joining Whitin in 1960.

50th Wedding Anniversary

Mr. and Mrs. Perley S. Chesley of 14 Calumet Court, Uxbridge, recently observed their 50th wedding anniversary. She is the former Sadie K. Cook, and he is a retired machinist for Whitin Machine Works.

Residents of Uxbridge for 43 years, they have six children: Mrs. Olivia Henderson of Whitinsville; Mrs. Ruby Robertson of Norfolk, Va., Clifford Chesley of Sutton, and Mrs. Erva Longmuir, Mrs. Nita Newhall and Leonard Chesley of Uxbridge.

WAY OUT . . . IN SPACE

Expansion of textile industry research and the space age's need for textiles are combining to help the nation's yarn and cloth industry find a prominent role in man's search for knowledge beyond the limits of Earth's atmosphere.

In fact, space age success is closely liuked with sweeping advances in textile technology, it was pointed ont recently at the 42nd annual meeting of the American Association of Textile Chemists and Colorists. About 1,800 scientists attended the meeting and heard a number of speakers say that new fibers and different production techniques will be necessary before man can move into the deep reaches of outer space.

(Continued on next page)



Is He All Right?

Happily, this time, the answer is yes. But 250,000 times each year in this country, the answer is a heartbreaking, fearful no.

Why does something go wrong when these tiny bodies are being formed? Why is a seriously defective child born to one out of every ten American families?

Can more of these children be helped with present medical knowledge?

What more do we need to know to prevent this from happening to babies not yet born?

Answers to these questions are being sought in nationwide programs supported by your contributions to The National Foundation-March of Dimes the largest single source of private support for birth defects research and care in history. These answers will help prevent birth defects, a problem concerning every family, everywhere.

Fight Birth Defects THROUGH THE MARCH OF DIMES! "Textiles play a vital role in future space operations," one scientist told the group, "because they can be packaged into a small volume prior to use. They are being considered for space suits, space stations, solar energy collectors, re-entry decelerators and numerous other essential space systems."

The speaker also pointed out that fibers already available can be used in some of the space systems he mentioned. However, he added that completely new materials and techniques are going to be needed for other systems.

Presently, he said, considerable research is underway on improvement of glass fibers and the development of fabrics from fine wire yarns. Both seem to hold a great deal of promise, but he cautioned that production machinery and techniques will have to be modified a great deal before either advanced glass fibers or fine wire fibers can be used in great quantities.

The textile industry, aware of space age needs as well as growing consumer demands, has stepped up its own research and development facilities tremendously in the past few years.

A recent report from the National Science Foundation shows that the combined textile and apparel industry increased its funds for research and development from \$13 million in 1957 to \$34 million in 1962. The total will be even greater in 1963, and most industry observers expect the total to keep climbing each year in the foreseeable future.

The combined textile and apparel industry has also almost doubled the number of full-time research and development scientists and engineers in the past six years. The National Science Foundation's report on research and development shows that the industry had only 700 full-time research and development scientists and engineers in January 1957, compared with 1,200 in January 1963. Only three other major industry groups mentioned in the report had such comparably large gains.

Concern for future needs and the industry's increasing interest in research and development are both indications that textile manufacturing intends to remain as one of the nation's modern, progressive industries.

PARENTS DON'T LET THEM QUIT

Parents of high school students have a chance to make this year worth an



MYSTERY PHOTO—In December, it was Dick Hare of the Research Division. Look among the ossistont foremen for the fellow on the right

average of \$17,500 apiece to their children. It is a startlingly large sum for a teen-ager to get for a year's effort. Many persons highly skilled make far less. But if parents keep their children in school this year, they can reasonably expect them to carn an average of \$17,500 more over their working lives than if they dropped out, according to the Chamber of Commerce of the United States. A full four years of high school would be worth \$70,000 extra.

Youths who drop out, moreover, may drift from one job to another throughout their lives. For educated persons, good, permanent jobs are plentiful.

The problem is critical. About one million youths will quit this year unless parents, friends, teachers, businessmen, and others act to help the waverers now.



WHAT'S WRONG WITH THIS PICTURE ?



Ysbrand Brouwer, 87, died on November 24. He was a Whitin employee for 40 years before his retirement in 1953. Two of his sons, William and Benjamin, are employed at Whitin.

Robert Laliberty, 25, died on November 13, a victim of a hunting accident. He was a turret hand in Department 411.

Eunice M. Gaddas, 64, of Hillsboro, N.H., died on November 7. She leaves a brother, Wallace of the Power Plant, and a nephew, Roy, of the Research Division.

