
EDUCATION
The Reflected Works
The Warren Standard Number 2
1924
WEBSTER'S NEW INTERNATIONAL DICTIONARY
THE LATEST AUTHENTIC EDITION OF THE MERRIAM SERIES
BALDWIN'S BLUE BOOK
sappi etc

The Warren Standard Number 2

For more than a century, through various names and incarnations, our message and mission have remained the same—to make the means through which the world communicates better and more beautiful.

We have a strong history of helping printers and creatives make smart decisions when it comes to making the most of readily available print technologies. Our go-to resources, vetted by experience, have created an ownable space for Sappi as an upholder of standards and creator of new ones.

Explore *The Warren Standard Number 2* from 1924 to see how we've always helped customers get the best printing results from our papers—something we continue to do today. By looking back through the pages, we can look forward to a future of exciting possibilities.

1924

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THE WARREN STANDARD

FEWER DOLLARS FOR POSTAGE
MORE DOLLARS FOR PRINTED PIECES

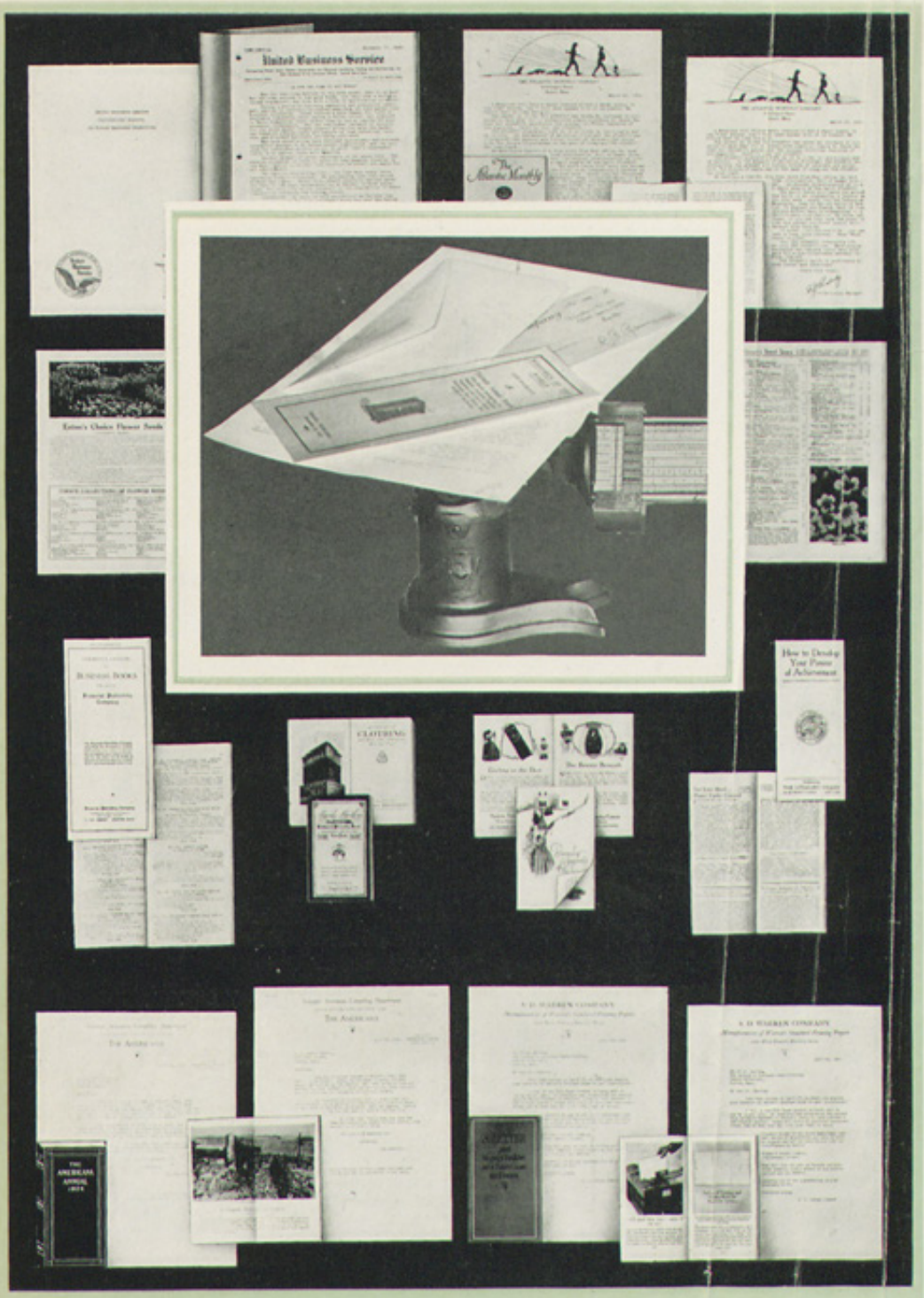
LIGHT CATALOGS, REFERENCE *and* DATA BOOKS BRING HEAVY ORDERS

KEEPING THE HARD-WORKING SALESMAN HAPPY

And also
A TALK ON THE MECHANICS OF HANDLING WARREN'S THINTEXT

NUMBER 2

NINETEEN TWENTY-FOUR



DOLLARS SAVED IN POSTAGE give more dollars for printed messages or for sending messages to more people. The reproductions on this page show but a few of the many attractive and effective ways in which Warren's Thintext has helped advertisers to economically deliver their advertising messages. Note the combination of material shown on the scales which, because of the use of Warren's Thintext, saved $8,640 in postage. (See page 1 for details.)

PACKAGE INSERTS many times must fit into very small and compact spaces, yet must, to be most effective, reproduce halftone illustrations well. Warren's Thintext fills every requirement of such inserts—it folds smoothly to the very smallest sizes and has a printing surface which reproduces type, halftone and color printing perfectly. The package inserts reproduced above show a few of the many uses of Warren's Thintext for messages of this character.

BOUND VOLUMES, whether publications of fiction or books containing data or pictures of merchandise, are easier to handle and more desirable if light in weight and compact. Technical books and catalogs, for instance, that are designed for constant reference will be used to a greater extent and because of this produce greater sales if printed on a thin paper such as Warren's Thintext. Some books previously printed on heavy papers and reprinted on Warren's Thintext have shown greatly increased sales. Some comparisons of light and heavy volumes are shown above.

THE WARREN STANDARD

In which will be published from time to time articles on various paper and printing problems

Number 2 S. D. WARREN COMPANY, BOSTON 1924

FEWER DOLLARS FOR POSTAGE MORE DOLLARS FOR PRINTED PIECES

THE carfare that a salesman spends and the amount of gasoline he burns contribute nothing to his earnings.

Except that the money spent this way makes it possible for him to reach his prospects and customers.

Stamps in advertising expenditures are in this same category.

The stamp is a ticket. It tells the postman that an advertising message is entitled to transportation. It costs money. It contributes nothing, however, to advertising returns.

It is the advertising message and not the stamp that brings returns and influences purchases and good will.

Dollars saved in stamps mean, therefore, more dollars for printed messages. Dollars saved in stamps enable the advertiser to send more or better messages to the same list or to send his messages to a larger list.

In either case, more returns are secured for dollars invested. And this begets greater belief in the power of direct advertising. Greater belief in direct advertising means more busy presses and more paper sales.

Warren's Thintext is a stamp saver.

It gives the advertiser the maximum in square inches of paper background with minimum bulk and weight.

It takes both halftone and type impressions well.

Here are some testimonials about stamp saving.

One advertiser wanted to reduce the postage on the mailing of an edition of 432,000 Annual Financial Reports. The Financial Reports were to be sent out in a No. 10 envelope, containing a letter 8½ x 14 inches in size and the dividend check. The Financial Report was, with the aid of very small size type, condensed to the minimum number of pages, size 3¾ x 8½, to fit the No. 10 envelope, and even then it required 16 pages and cover.

On previous editions of the same combination of material the cost of mailing was 4 cents first-class postage. With the use of Warren's Thintext for the 16 pages in the Annual Financial Report booklet the postage was reduced to 2 cents first-class postage. And the result to the advertiser was a gross saving of $8,640.

The story of the production of this Financial Report booklet on Warren's Thintext is extremely interesting because of the net saving to the advertiser even though Warren's Thintext costs considerably more per pound than paper previously used.

The job required 144 reams of 36 x 48 Warren's Thintext. It was run on a cylinder press fed by a Cross automatic continuous type of feed and press production averaged 1100 impressions per hour.

The job was folded in a sheet size 16 x 18 and the average folder production was 2600 per hour.

With these figures checked against previous runs the estimated net saving to the advertiser was $7,626.24.

Not all advertisers have editions of similar large quantity, but there are many now making use of 45 and 50 pound papers to reduce weight who will find in Warren's Thintext an opportunity to cut their postage one or two cents per mailing list name, thereby make substantial savings over a year's time.

Another advertiser had a double advantage in the use of Warren's Thintext on an edition of 10,000 booklets.

A booklet was planned to contain considerable statistical information which the advertiser desired very much should be carried and used frequently by those who were to receive it. If the booklet could be arranged to fold to pocket size, it was believed that a worth while percentage of the mailing list would carry and use it.

By printing the 8¾ x 11 inch booklet on Warren's Thintext, rather than on heavier paper, it was possible to fold it twice to a compact size of 3¾ x 8¾ which would slip into the pocket easily and be available for ready reference.

And making sure the information was put up in such form that it would be used regularly, was not the only advantage in using Warren's Thintext for this job. With the use of Warren's Thintext, it was possible to cut down the mailing cost 2 cents on each copy and on the edition of 10,000 booklets save $200 on the mailing of the issue.

The following extract is from a letter reporting a test made on Warren's Thintext by an organization issuing syndicated stories for newspapers.

"Ever since last March 15, when the income tax was due, I've been sore at the Government. I welcomed a way to beat 'em out of postage. However, I was afraid of this Thintext; it seemed as unholy as any other something-for-nothing scheme, because the saving made in postage is more than the cost of Thintext. As a result, I split the order, having half of the run printed on M. F., as in the good old past, and the other half on Thintext. Now, after seeing and handling the completed job, I sit here in tears as I watch the office boy stick six cents in stamps on one stack of envelopes and four cents worth on the other."

While this organization spends considerable money for postage to place copies of the stories available in the hands of their prospects and are naturally vitally interested in reducing postage costs in every way possible, their stories must be presented in attractive and readable form. That Warren's Thintext has satisfactorily filled their requirements with its clean-cut, sharp reproduction of small type and line cuts and at a substantial saving in money is evidence that it is truly an economy paper for many forms of mail material.

Further details and names of these advertisers gladly furnished on request.

LIGHT-WEIGHT COMPACT BOOKS

Warren's Thintext because of its very light weight makes compact books of many pages available. 1184 pages, basis 24 lb., are contained in a book one inch thick and a book of 1,000 pages, basis 24 lb., 6¼ x 8¼, with hard cover, weighs only twenty-three ounces

THE BUYER DOESN'T "CUSS" A BULKY CUMBERSOME REFERENCE BOOK OFTEN—

HE JUSTS STOPS USING IT

The experience of chain cigar stores and chain grocery stores should mean something to those who issue catalogs, data books and reference books.

A store located on one corner makes no profit. Moved to the opposite corner, it turns red figures into black.

The lesson is this:

A buying public that won't cross the street to buy what it wants and needs won't juggle bulky cumbersome books to get information.

Buyers don't have to wrestle with bulky cumbersome books. Someone will cater to their convenience.

So awkward, bulky, cumbersome books find their place eventually on a shelf, or at the bottom of a pile of other books.

They collect few orders.

They are too busy collecting dust.

Warren's Thintext turns stolid dust-collectors into active order-collectors.

It turns heavy, stay-at-home data and reference books into pocket companions.

Through the use of Warren's Thintext, the advertiser can put a large number of items into a catalog or an immense amount of data into a reference book. And the book will still be light, compact and convenient.

Samples are shown on one of the back cover pages.

DATA BOOKS IN VEST POCKET SIZE

Compact, convenient information makes selling easier. Warren's Thintext makes it easy to provide salesmen with necessary data in accessible form. Printed on Warren's Thintext, basis 24 lb., a 3 x 6 book of 800 pages can be carried in the vest pocket

LO, THE HAPPY SALESMAN

With a Bit of a Grin
And a Lifted Chin —*Kipling*

You may recall the day when you were a cub salesman. Perhaps you are yet.

You were told on the first day:

To wear a clean collar.
To keep your shoes shined.
To keep your clothes pressed.
To keep cool—and cheerful.
And keep going.

These were and still are good instructions. Provided the salesman starts with no *unnecessary* handicaps.

No salesman can keep going and cool and cheerful if his arm is being gradually dragged from its socket by a needlessly heavy sample case.

Nor can he look like Lord Chesterfield if his inside or side coat pocket is fattened with a data book that equals in bulk an unabridged dictionary.

The salesman in such a predicament has two choices: He may disregard the instructions about personal appearance, or he may leave behind a few heavy catalogs and take from the data book the pages he uses least.

And if like most good salesmen he is particular about personal appearance, he will probably do the latter. And this may mean lost orders.

So it is good business to make catalogs to be carried in bags and data and reference books to be carried in pockets, light and compact.

The salesman will be happy. He will sell more goods because he will carry the complete data which influences sales.

Warren's Thintext makes light, compact catalogs and data books.

IS WARREN'S THINTEXT DIFFICULT TO HANDLE IN THE PRESSROOM AND BINDERY?

THIS QUESTION IS ANSWERED HERE BY GIVING THE EXPERIENCE OF SOME PRINTERS

"How many impressions per hour can be gotten on Warren's Thintext?" This is, perhaps, the first question a printer will ask when Warren's Thintext is suggested as a booklet, folder or broadside paper.

"How fast can it be folded?" probably will be the second.

We have asked printers who handle Thintext to answer these questions. On the following pages are stories of their experiences, together with pictures covering some of the many suggestions they have offered.

Trouble in handling Thintext either on presses or folders comes as one superintendent put it, "largely before the job actually goes to press. Once a pressman handles it, he is surprised to find Thintext is not the trouble breeder he thought it was going to be."

As a matter of fact, in every pressroom where Thintext has been handled, you will find a pressman who is proud of his achievement in producing Thintext jobs on nearly the same run per hour basis as 50 and 60 lb. papers. They will tell you "it's all a matter of adjustment." And probably that does very accurately and completely tell the story of good pressroom and bindery performance on Thintext jobs.

It is true more care must be given to adjustment of both presses and folders when handling a 24 or 30 lb. sheet of Warren's Thintext than when handling heavier sheets, but correct adjustments are simple matters, taken largely as a part of the job by pressmen and operators. On cylinder presses with automatic feeds for instance, a little more care must be taken in adjusting tensions on the feed comber wheels. Grippers, stripper fingers, delivery rolls all must be set slightly different and to a little closer adjustment than for heavier sheets. On automatic job presses good performance depends to a great degree upon control of air, both suction and blow, and upon gripper tension. On folding machines, Thintext naturally has more "give" when it hits the "stops" or "guides" and tensions must be carefully set to slow the sheet down a little quicker than when handling heavier paper.

With fairly accurate machine adjustments to suit the speed at which it may reasonably be handled, Warren's Thintext will give performance equal to heavier sheets and with no more bother or delay.

This seems pretty well established by the reports we have received from pressrooms and binderies where Warren's Thintext has been handled and from such records as we have been able to gather in checking the production on various types of presses and folders. Pressroom and bindery experiences to date in handling Warren's Thintext would seem to indicate that the following production averages might well be expected, for in our records we have endeavored to cover many kinds of forms and operating conditions:

Presses

Cylinder—Hand feed—1,000 sheets per hour
Automatic feed—1200 to 1500 per hour

Job Press—Automatic feed—1500 to 2,000 per hour

Folders

Hand or automatic feed—2,000 to 3,000 per hour

We believe these figures may be taken as a conservative basis for judging production of Warren's Thintext jobs, because we know in many cases a much greater output is being obtained. For instance, on one run that came to our attention, 350 reams of 25 x 38–30 Thintext handled on an automatically fed Miehle press, the actual production was timed at 2280 per hour. An excellent example of high speed consistent folder production is that cited on page 2, where a 432,000 sheet run (size 16 x 18) averaged 2600 per hour.

It is well in starting to handle Warren's Thintext for the first time in a pressroom or bindery to realize it is quite different in "feel" and "body" from coated paper and that it will act differently on the machines. A little time and experience will greatly increase both the quantity and quality of the work produced by pressman and folder operators.

In every discussion of handling Warren's Thintext beyond the questions of —"How much per hour"—are questions on how to overcome some kinks that have occurred either on the presses or folders. On the following pages are a number of pictures and captions which cover the points most likely to bother those who have had no experience handling Warren's Thintext.

HAND FEEDING WARREN'S THINTEXT

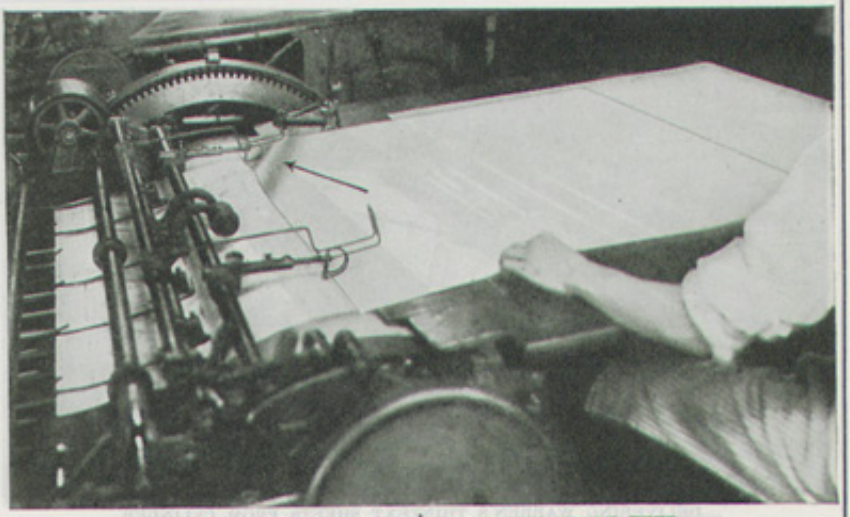
Large sheets of Warren's Thintext are quite different in "feel" from almost any other sheet that is likely to come to the press and because of this cannot be handled with quite the same "snap and swing" given the heavier sheet when being fed to the gauges.

There is nothing particularly difficult, however, in swinging a sheet of Warren's Thintext to the gauges and with a little experience at slow speed any feeder will soon be handling it at usual speed.

Feeders have found it easier to "pull" or "draw" feed Warren's Thintext than to "push" feed it and on jobs being printed only one side it might be well to plan feeding that way. The reason for this is, when "pull" feeding there is very little sidewise slide necessary because the sheet is carried close to the side guide and there is little chance for the sheet to buckle.

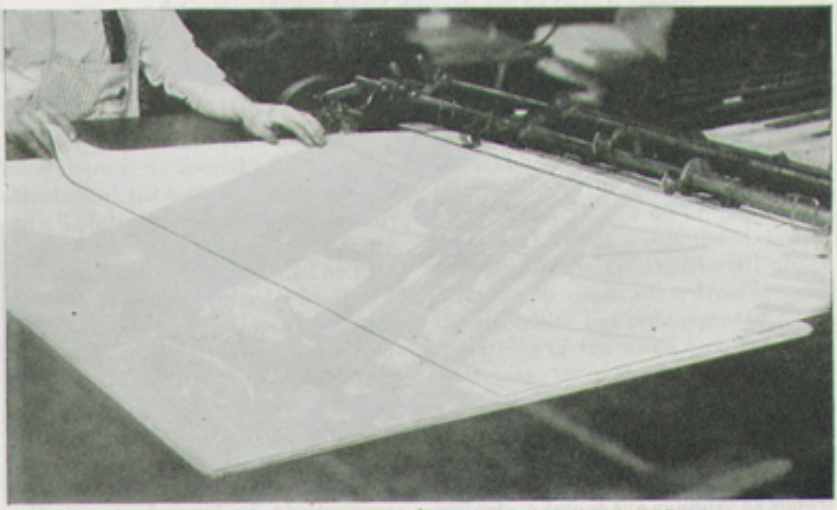
When it is necessary to "push" feed a sheet of Warren's Thintext, as in the case of a work and turn form, it is well to try to hit both front guides at the same time and in carrying the sheet to the front guides have it as close to the side guide as possible. This shortens the length of the necessary sidewise slide and will help overcome any tendency to buckle. If the sheet strikes one front gauge before the other, there may be a tendency to buckle up slightly as shown in the picture, top of page 7, making it necessary to pull the sheet back, trip the press and start again. If frequent, this means lost production but it can be readily overcome if, as suggested, care is taken to strike both gauges at one time.

(Continued on page 9)



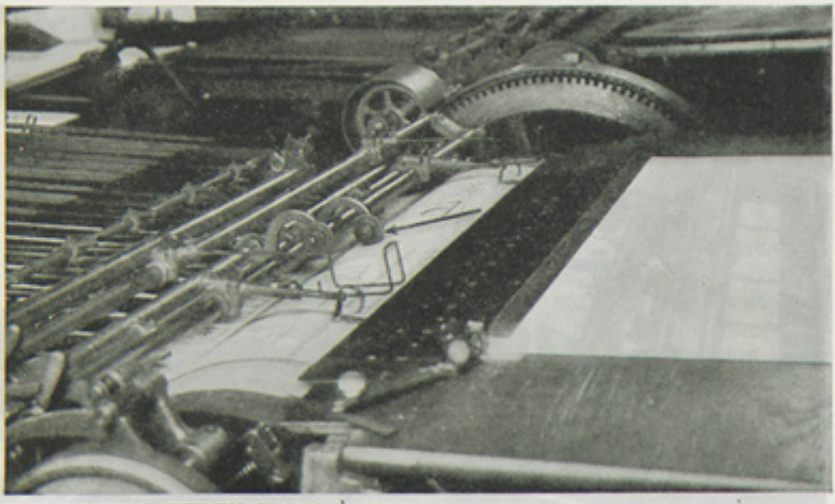
HAND FEEDING WARREN'S THINTEXT—PUSH FEED

When push feeding large sheets of Warren's Thintext, carry the sheet close to side guide hitting both front guides at once. Otherwise, one corner is likely to roll up slightly, as pictured above, and interfere with sliding toward side guide



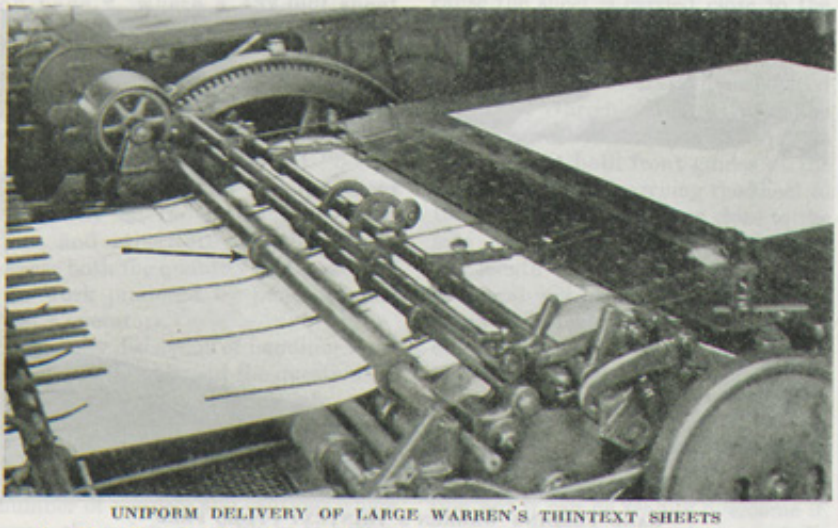
HAND FEEDING WARREN'S THINTEXT—PULL FEED

Most feeders find it easier to pull or draw feed large sheets of Warren's Thintext since very little slide sidewise is necessary because of the natural tendency when pull feeding to carry the sheet close to the side guide. See automatic feed pictures, page 21



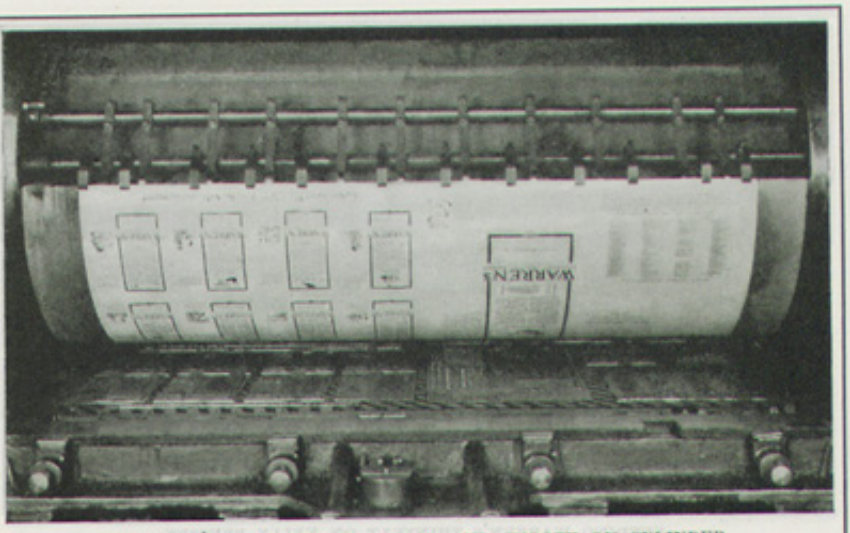
DELIVERING WARREN'S THINTEXT SHEETS FROM CYLINDER

A top guide roll set on the cylinder, as shown above, will help greatly in obtaining uniform delivery of large Warren's Thintext sheets. This gives an even, steady control of the sheet until it reaches the next drive roll which should be placed as shown below



UNIFORM DELIVERY OF LARGE WARREN'S THINTEXT SHEETS

A guide roll on the slitter bar will help obtain smooth, uniform delivery of large sheets of Warren's Thintext onto delivery tapes and jogger. This carries each sheet out exactly the same distance. If there is electricity in the paper the guide roll is very necessary



WARREN'S THINTEXT LIES FLAT AND SMOOTH ON CYLINDER

The illustration above shows a sheet of 38 x 50—basis 24 lb. Warren's Thintext being printed with a heavy form made up of heavy line cuts and type. A careful examination of the sheet between grippers and on cylinder shows how care in setting gripper tension and a flat makeready has helped eliminate any tendency to wrinkle

(Continued from page 6)

AUTOMATIC FEEDERS ON WARREN'S THINTEXT

So far as we have been able to determine there is no special adjustment or attachment necessary to handle Warren's Thintext at good speed with any of the various types of automatic feeds.

The press run figures quoted on page 2 are evidence that its feeder was working smoothly. Other forms of automatic feeds work equally well. Those depending on "blow" and "suction" air for handling the sheet readily adapt themselves to Warren's Thintext and operate smoothly with very little air pressure.

Pictures of some of the various automatic feeds handling Warren's Thintext are shown on pages 10, 12 and 21.

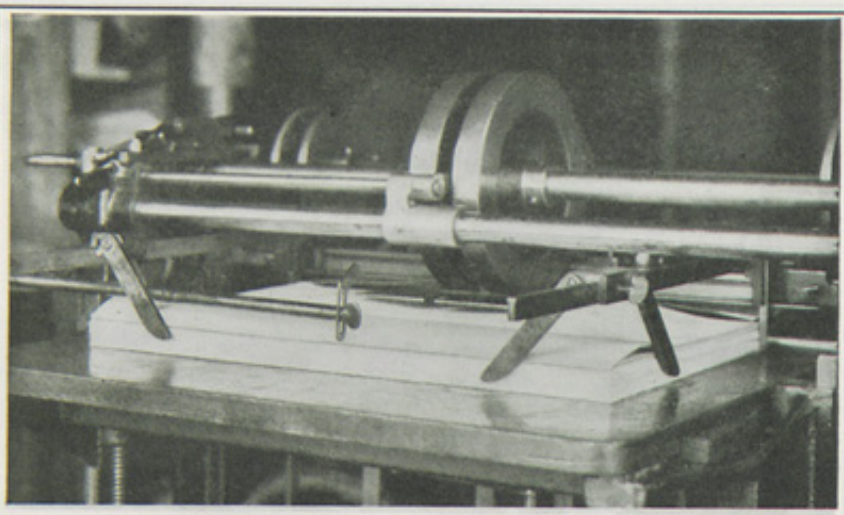
DELIVERY OF WARREN'S THINTEXT ON CYLINDER PRESSES

Unless an unusual amount of electricity has accumulated in the Warren's Thintext to be run, there should be no difficulty in delivering it as smoothly as a 50 or 60 lb. paper.

If Thintext has accumulated considerable electricity, it, like all other papers, will cause some trouble until the electricity has been removed.

Outside of the usual troubles from electricity, there should be nothing to retard the smooth delivery of Thintext if the usual care has been taken in adjustment of shoo-fly and stripper fingers.

It may be well to always use a guide roll set on top of the cylinder as shown in the picture at the top of page 8. This will help first to hold the sheet smooth on the cylinder before it is printed and



FEEDING WARREN'S THINTEXT ON KELLY PRESSES

Feeding Warren's Thintext at good speed on Kelly presses is not extremely difficult. The picture above indicates the air adjustment used on Warren's Thintext by one Kelly pressman who handles it very successfully and maintains a production equal to that when running 60 lb. or 70 lb. paper

after the sheet is printed it gives an even steady control on the sheet until it reaches the next roll, which should be set on the slitter bar as shown in the lower picture on page 8. This second roll will help to drive the sheet well out on the delivery tapes in proper timing, so it will carry smoothly into the jogger.

The picture at the top of page 9 is also shown to demonstrate how care in setting gripper tension and an even, flat makeready will help to eliminate any tendency of thin papers to wrinkle. Note how snugly the sheet of Thintext hugs the cylinder and that there is no indication of a buckle between grippers.

HANDLING WARREN'S THINTEXT ON KELLY PRESSES

Kelly press operators are handling Warren's Thintext cut to various size sheets at speeds which average a remarkable daily output and doing it with little annoyance because of the light weight of the paper.

If there are any outstanding points in the handling of Thintext on Kelly presses that need particular attention, they are:

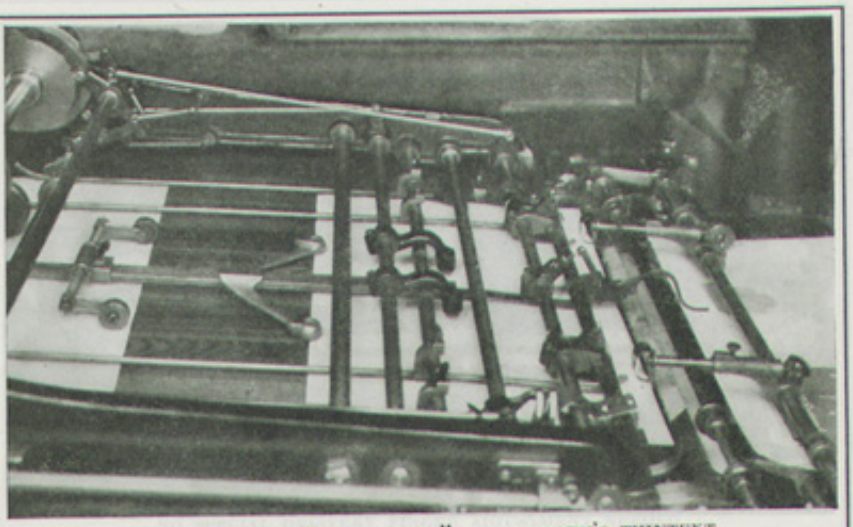
First, to be sure the paper has come from the cutter in a perfectly flat condition and is in shape to be readily separated by the air feed (see story on cutting Thintext, pages 15 to 18).

Second, to see that the air is adjusted properly at the feed.

Third, to adjust properly the "tail riders" which steady the sheet against the guides.

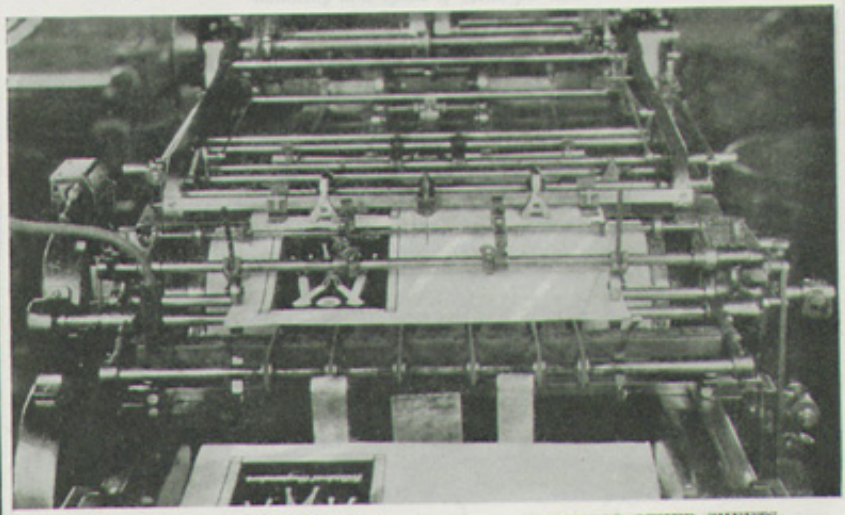
If Warren's Thintext has been

(*Continued on page 13*)



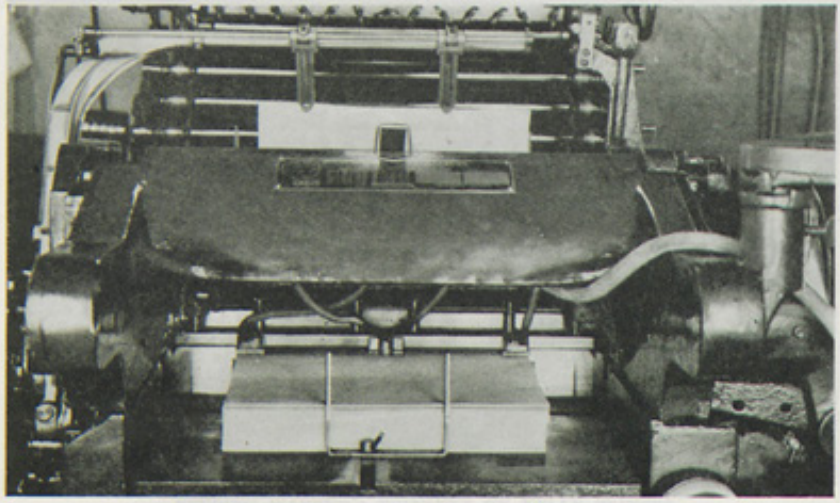
ADJUSTMENT OF "TAIL RIDERS" FOR WARREN'S THINTEXT

For Warren's Thintext use only the lightest weight "tail rider." It should be set, as shown above, on the very back edge of the sheet. This has been found all the weight necessary to hold Warren's Thintext to the guides and to work smoothly at speed



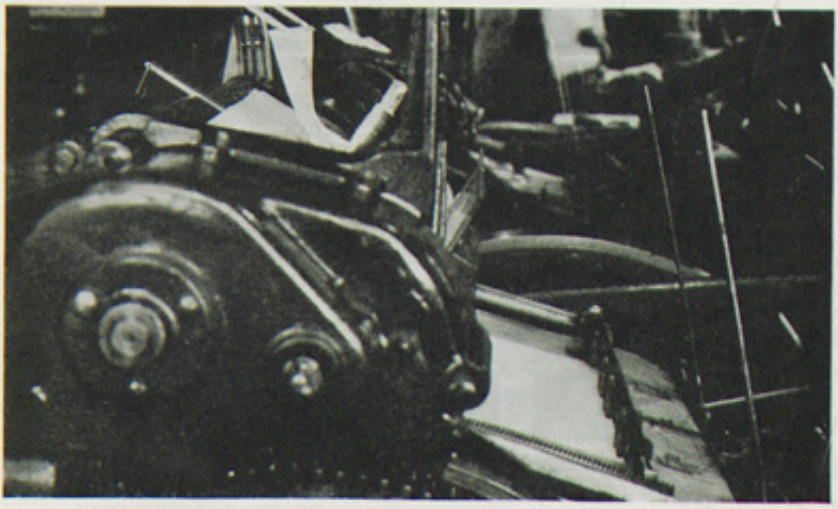
DELIVERY OF WARREN'S THINTEXT HANDLED SAME AS OTHER SHEETS

This picture shows the Kelly delivery handling a sheet of Warren's Thintext. Guide rolls are in position as on all jobs and no special provision is necessary, so far as we know, to deliver Warren's Thintext satisfactorily even at Kelly speed



MILLER FEEDER HANDLING WARREN'S THINTEXT

The successful handling of Warren's Thintext by the Miller Feeder starts first with a careful adjustment of the air at the Separator Feet. The "A" Separator Feet should be used and very little air will be needed to separate sheets of Warren's Thintext



MILLER FEEDER GRIPPER TENSION FOR WARREN'S THINTEXT

Use the lightest possible gripper tension for Warren's Thintext. One pressman who successfully handles Warren's Thintext on the Miller Feeder removes the coil springs from the feed grippers, using only the natural closing of the gripper for tension

NO SPECIAL DELIVERY FINGER ADJUSTMENT NEEDED

The delivery fingers of the Miller Feeder are so finely adjusted no further adjustment of tension is needed to handle Warren's Thintext as readily as heavier papers. The picture above shows the delivery fingers holding a sheet of Thintext from a run it was handling at a speed of 2,160 per hour

(*Continued from page 10*)

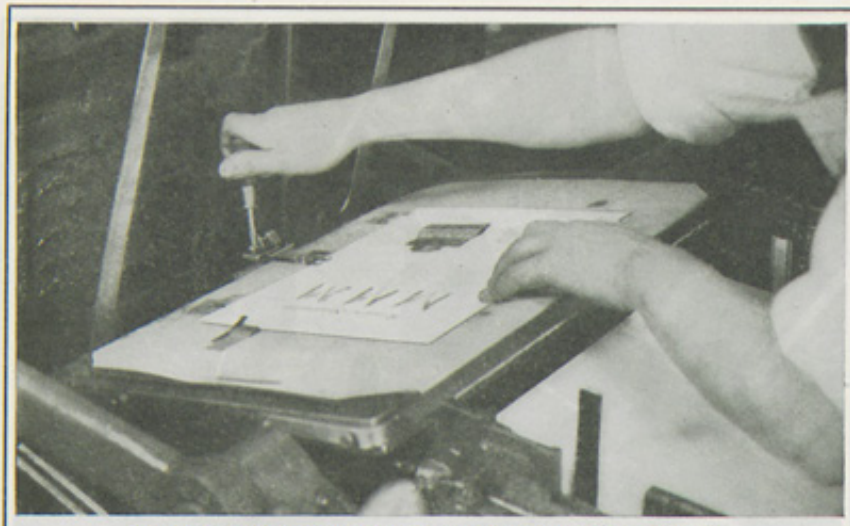
carefully handled at the cutter so there are no deeply indented clamp marks and no crimped edges caused by a dull cutter knife to interfere with the ready separation of the sheets by the "blow" air, there is little difficulty in regulating the feed on Kelly presses to handle Warren's Thintext as rapidly as it can be put through other parts of the press. Very little air pressure will be necessary to "lift" and "carry" the sheet perfectly.

Kelly pressmen have found Warren's Thintext handles most smoothly at the gauges if only one "tail rider" is used. They invariably use the lightest set and place it at the back edge of the sheet as shown in the picture at the top of page 11. It is possible to run Thintext with two riders and some pressmen follow the practice of using the light weight set placed half-way back on the sheet and the medium weight set placed at the back edge. Experience seems to show, however, that at high speed greater smoothness may be obtained with the use of only the lightest weight "tail rider." See picture top page 11.

HANDLING WARREN'S THINTEXT WITH MILLER FEEDERS

To see the smoothness with which Warren's Thintext is handled by the Miller Feeder leads one to think weight of paper makes little difference to the operating efficiency of these feeders.

The job being run when the pictures reproduced on pages 12 and 13 were taken was timed at an average production of 2,160 per hour. (Sheet size 9 x 12 inches.) That consistent pro-



SETTING MILLER REGISTER FORK FOR WARREN'S THINTEXT

It is well to adjust the Register Fork tension with considerable care for a run of Warren's Thintext. Because of its extreme light weight, it requires very little sidewise push to carry it to the side guide and not cause a wrinkle which may throw out register. Use lightest possible tension

duction was also maintained is evidenced by the fact entire lifts were run without trouble from paper causes of any kind.

There are three adjustments that require special attention in setting the Miller Feeder to handle Warren's Thintext, (1) the air at the feed, (2) the gripper tension and (3) the register fork.

In setting up the feed, it is well to use the "A" separator feet for Thintext and only the very lightest air pressure will be needed.

Most pressmen experienced in running Thintext have found in setting the gripper tension that smoothest results are obtained with only the natural closing of the grippers themselves. They eliminate all additional pressure by taking the coil springs out of the grippers altogether and find the lighter gripper tension works perfectly.

The Miller Register Fork adjustment for handling Warren's Thintext is rather a delicate one. In setting this adjustment, it is well to have it just tight enough to hold the weight of the sheet itself, or just tension enough to be sure it will slide up to the side guide firmly but without crowding. With a little care in making this adjustment at the start of the run, however, no difficulty will be encountered in handling Thintext at good speed and with perfect register.

The delivery gripper fingers will need no special attention. They are delicately enough adjusted to adapt themselves readily to the light weight of Thintext and handle it very accurately.

HANDLING THIN PAPERS CAREFULLY HELPS AVOID TROUBLE

It is very easy to cause a lot of trouble for pressmen and folding machine operators by careless handling of lifts of thin paper. Such handling as that shown in the above picture will put folds, wrinkles and buckles in the paper that make it nearly impossible to handle it smoothly through presses and folders

HANDLING WARREN'S THINTEXT AT THE CUTTER

MUCH TIME AND TROUBLE ON PRESSES AND FOLDERS CAN BE SAVED BY PROPER CARE IN CUTTING

It is important to start right in handling the production of quality printing on Warren's Thintext—to eliminate at the start as far as possible the likelihood of trouble on presses and folders by careful handling of the sheets when being unpacked and cut.

When you see a job of fine printing on thin papers, you know someone has used care in the handling of the paper and also through each step in the production of the job from the time the case was opened until the finished job was packed and delivered.

If thin paper is to be printed and folded in the full sheet, the care necessary is largely a matter of right handling as it is taken from the case and placed on the machines or piled. It is very easy to put permanent waves or buckles in thin papers and particular care should be taken to keep the paper just as flat as it was in the case.

Thin paper in large sheets which has been handled carelessly and as a result has developed waves or buckles, will later cause trouble on the press and folding machine. Such trouble would not be encountered with flat paper. On page 9 is a picture showing how flat Warren's Thintext will lay on the cylinder if it has been properly handled,

USE FLAT CLAMP WHEN CUTTING THIN PAPERS

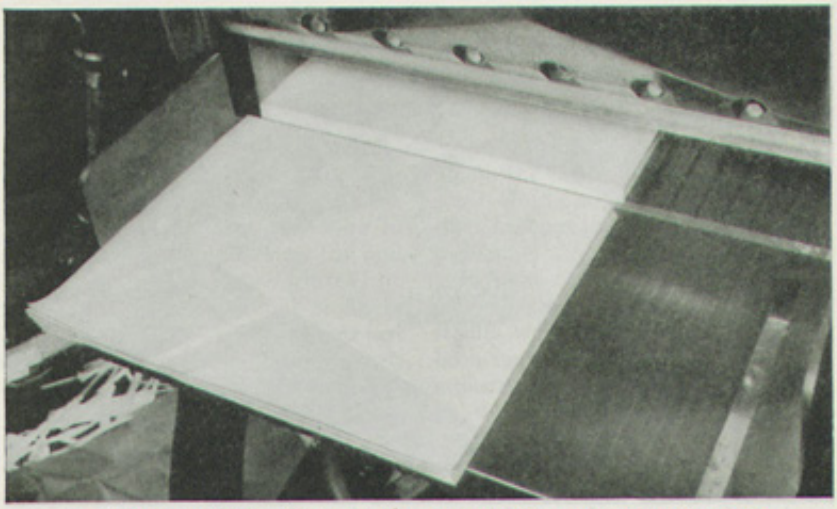
This picture shows one operator adjusting the flat steel face to his cutter clamp to help keep the individual clamp heads from marking and indenting thin papers. This is one good method of guarding against annoying press and folder delays

Such sheets may be printed without the slightest tendency to wrinkle and will be delivered to the folder in good condition for folding.

Thin paper cut to small sizes for handling on small presses with automatic feeds presents a more difficult problem so far as the handling and cutting is concerned and it is with such lots we suggest particular care be taken. Steady running and quantity production of jobs printed on thin paper by automatically fed job presses depend to a great degree upon the ease with which the sheets may be separated by the feeder and handled with speed by the automatic gripper arrangements for feeding and delivering the sheet.

It is much easier to put damaging cutter clamp marks into thin papers than heavier coated papers. And these heavily indented clamp marks are one of the results of careless handling at the cutter that make it hard to properly adjust the blow and suction air of automatic feeds so the feed will operate smoothly. The top of a lift having these strong clamp indentions will require more air, both blow and suction, to handle it speedily than sheets further down in the lift which are perfectly flat. When the flat sheets are reached, and the air has been set strongly enough to rapidly separate the indented sheets, trouble is likely to result from two or more sheets being picked up at one time.

Another result of careless cutting which makes it difficult to rapidly separate sheets of thin paper is the "roll" or "crimp" likely to occur along the edge of the top of every lift cut with a dull cutter knife. Until these sheets have been run out more air will be needed to separate them probably than



CUTTING WARREN'S THINTEXT FOR AUTOMATIC FEEDS REQUIRES CARE

The illustration above shows a lift of Warren's Thintext which has been cut after the flat steel face had been adjusted to the cutter clamp. Notice there are no indentions or clamp marks to interfere with accurate speedy operation of a mechanical feeder

for the flat sheets of paper lower in the lift.

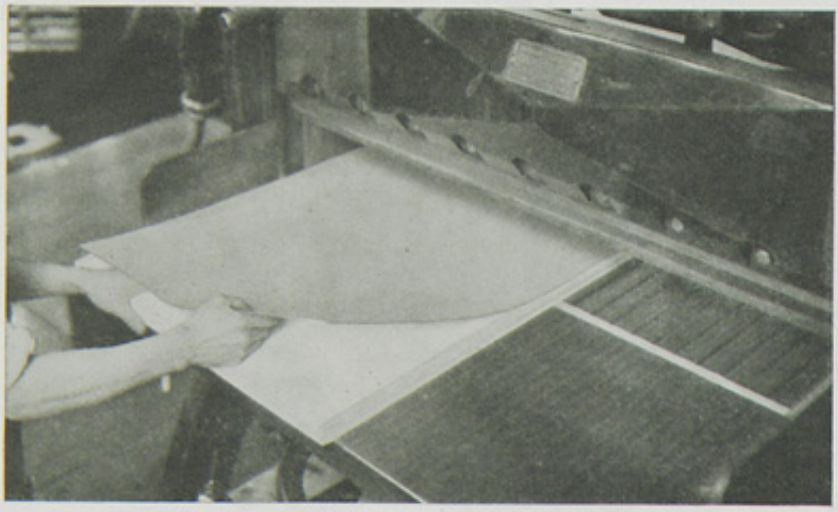
And even after a sheet of thin paper cut in this way has been through the automatic feeders and done its part to make life miserable for the pressman it still is a trouble maker. The folder operator is the next one likely to encounter trouble.

To obtain accurate register on folding machines when handling thin paper, there must be no crimped or curled edges to catch on rolls or tapes and no heavy clamp-indention marks which will tend to cause buckling or wrinkling.

We have purposely pointed out in detail the troubles which are apt to occur in the handling of thin papers—even to the extent perhaps of making it seem that ideal conditions must always exist to get reasonable production when handling thin paper. Such is not the case, however. But it is true that the man operating the cutter can add much to the burden of printing thin papers or with a little precaution he can deliver cut sheets in such shape they may be handled as readily as 60 or 70 lb. sheets.

And the precautions necessary to take at the cutter are simple. Bear in mind—flat smooth sheets must be delivered to the presses and folders. To accomplish this is not at all difficult for an experienced operator who knows the condition of his knife and who realizes it is in his power to greatly help his associates in the production of good printing on thin papers at reasonable operating speed.

Some of the simple precautions which will help greatly to insure flat smooth sheets of thin paper when cut to small sizes are shown in the pictures



ANOTHER METHOD OF CUTTING WARREN'S THINTEXT

This picture shows another method of cutting Warren's Thintext which will help insure good press production by delivery of only perfectly flat sheets to automatically fed job presses. A sheet of pulp board is placed on top of the lift before clamping and cutting

on pages 16, 17 and 18. In the picture shown on page 17, the operator, understanding conditions surrounding the handling of thin paper, has adjusted the flat steel plate (which is a part of nearly every cutter equipment) underneath the regular clamp. In this manner he is sure of eliminating the many sharp indentions from the points of the interlocking clamp.

The only objection to this method is that if too thick a lift is cut at one time a straight crease will be made by the edge of the flat steel plate, full width of the sheet, parallel with the cut edge. This may not be serious, but it can be entirely eliminated if desired by the method shown in the picture above.

The method followed is to first attach flat clamp, then before cutting place a sheet of pulp board on top of the lift to be cut. In this way, the clamp does not come in actual contact with the paper and there is no chance of marking or creasing the paper in any way.

Whatever method is followed in cutting thin papers, it is always well to cut only small lifts, bearing in mind thin papers have more "spring" or "give" than heavy coated papers and are therefore more receptive to pressure from any source.

Reasonable precaution in handling thin papers at the cutter will save many hours and help eliminate much of the trouble that sometimes arises in the pressroom and bindery.

HANDLING WARREN'S THINTEXT ON FOLDING MACHINES

If, in the light of the experiences of those bindery operators who have handled the folding of many different kinds of Thintext jobs, we were to answer the questions of "How fast and how well can Warren's Thintext be folded?" the answer would probably be something like this—"Nearly as fast and just as accurately as any sheet, once the machines are set for it."

And so it can be. On the folding machine as on the presses, little more difficulty is encountered because of the light weight of Warren's Thintext than is likely to be found in handling sheets of heavier weights.

There are also some ways in which it is much easier to turn out a perfectly folded job from Thintext sheets than it is from heavier coated sheets. For instance, no difficulty will be encountered because the grain runs the wrong way of the fold. Warren's Thintext folds well either way of the sheet. This is of course because of the extreme light weight of the sheet and its great flexibility. No difficulty will be encountered because the paper has been exposed to excessively dry atmosphere and become brittle. There will be no cracked or broken folded edges. While it is true Thintext, the same as all other papers, will fold better and smoother if it contains a proper amount of moisture, if it should become excessively dry the usual folding troubles of coated papers will not be encountered in any serious degree.

Since it is through careful attention to minor adjustments that operators are able to so smoothly handle the folding of Warren's Thintext, we are showing on the following pages pictures of some of the adjustments which help them iron out the kinks in folding thin papers.

In some of these pictures we have gone so far as to show a comparison of results which may be expected from both improper adjustment and proper adjustment. Where we have done this, it has been for the purpose of more graphically picturing the method of overcoming the difficulty and is not in any sense an indication that more trouble may be expected at those points on the machine than at others. Neither do they indicate that more trouble will be encountered on one type of folding machine than on another. Experience has proved that Warren's Thintext may be folded successfully, at a reasonable speed, on any type of folding machine.

These pictures will show the troubles likely to occur and suggest a remedy which if followed will help to immediately overcome the difficulty. These pictures are shown for that purpose alone.

In taking the pictures of folding operations, we have purposely shown one type of machine handling a large sheet with an automatic feed and another type of machine handling a smaller sheet and hand fed, in order that we might show as great a variety of feeding and folding conditions as is possible.

The two pictures on page 21 show the automatic feed attached to a Dexter folder and handling sheets of 25 x 38–24 Warren's Thintext. The picture

at the top of the page is taken from an angle which shows clearly how smoothly large sheets of Thintext "fan out" and ride down to the comber wheels without the slightest difficulty from bunching or buckling.

The lower picture on page 21 shows a close-up of the comber wheels of the same feeder. The pressure adjustment of these comber wheels is about the only adjustment that needs special attention when handling Thintext with this type of automatic feed.

Note in this picture the pressure on the comber wheel makes very little indention in the pile of Thintext. The operator has found Thintext requires very little pressure to feed smoothly and makes a practice of removing all screw pressure, the weight of the comber wheel itself being sufficient. Too much pressure creates a tendency to jam or crowd Thintext against the gauges too hard, causing trouble from buckling.

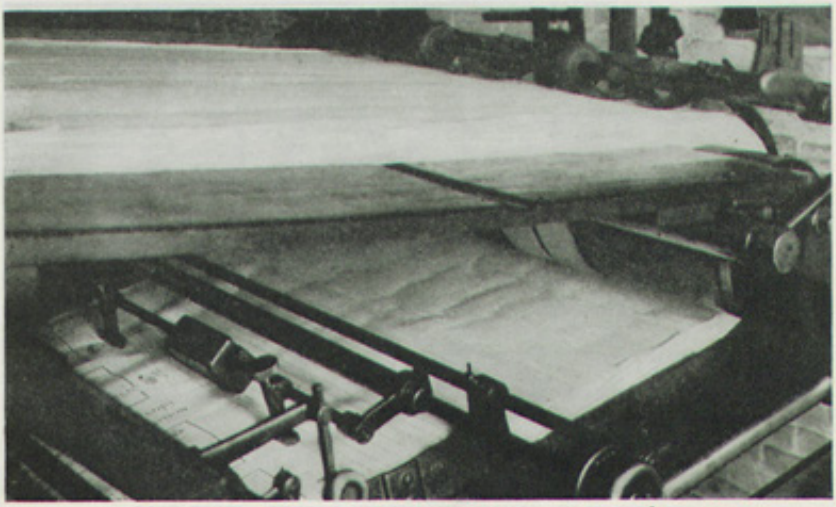
In order to obtain accurate folding of Warren's Thintext on machines of the tape type, it is necessary to give careful attention to the speed and force with which the sheet strikes the front guide. This is particularly true on the first fold where there is only one thickness of the paper. Warren's Thintext is so light in weight and therefore so flexible, if it strikes the front guide with too hard a bump it is bound to buckle up along the side striking the guide and cause trouble by not always straightening out before the blade forces it between the folding rolls. The picture at the top of page 22 shows how one operator sets the two rubber slow downs on the back side of the sheet to overcome this difficulty. Note the sheet is first placed about ¾ of an inch away from the guide and then the stops lowered on to the sheet sufficiently strong to slow down the sheet when it arrives at this point, allowing it to ease up to the guide in a perfectly flat condition and in shape for perfect register. The steel slow downs are placed as usual but with very light tension.

Easing up on the tension of the tapes will also help in lessening the draw on the sheet by retarding somewhat the speed with which the sheet travels.

After the sheet of Warren's Thintext has been folded once it has body enough to stand the usual bump of hitting the guide without causing trouble of any kind. The lower picture on page 22 shows the second fold set on a Thintext sheet with the steel slow downs and wooden drive-up wheels in their usual positions. Very little tension will be found necessary on the steel slow downs even on this fold.

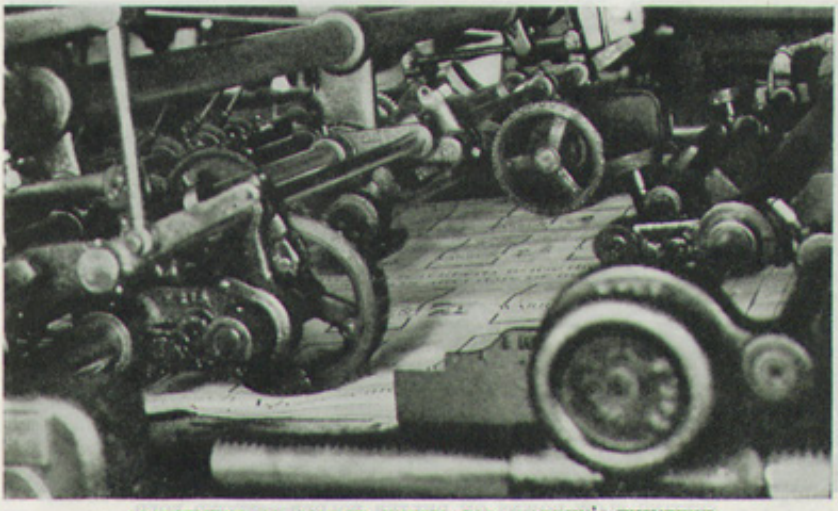
That it is not unusually difficult to handle folding of Warren's Thintext on folding machines of the tape type is evidenced by consistent and uniform production pictured at the top of page 23. This picture shows the results which may be reasonably expected with proper care given to the adjustments mentioned above. This jogger full of folded sheets is from the run pictured on pages 21 and 22. The sheet was 25 x 38–24 Warren's Thintext, folded to 6 x 9 booklet size. It was automatically fed as shown on page 21 and at a speed of 2,000 per hour and the jogger full shown was run without stop. With a little care given to minor adjustments similar results when folding Warren's Thintext may reasonably be expected on this type of folding machine in any good bindery.

Accuracy and smoothness of operation in handling Warren's Thintext on the Cleveland folder depends upon a



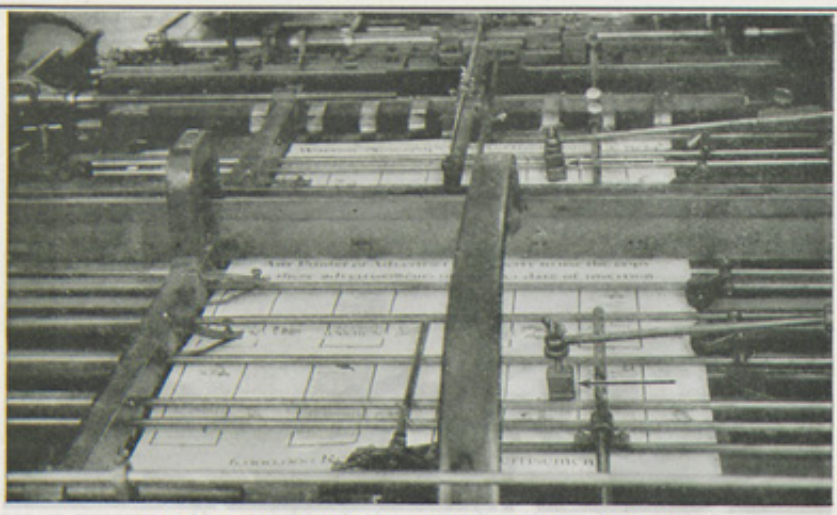
AUTOMATIC FEEDER HANDLING LARGE SHEETS OF WARREN'S THINTEXT

The above picture is a close-up of a pile of 38 x 50 basis 24 lb. Warren's Thintext being fed to the folding machine at a speed of 2,000 sheets per hour. No special adjustment is necessary here to satisfactorily handle Thintext at any reasonable speed



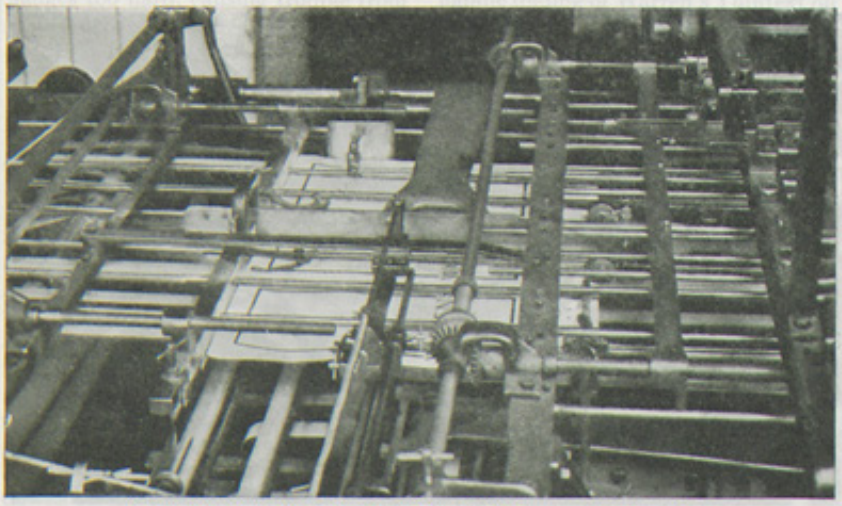
ADJUSTMENT OF COMBER WHEEL FOR WARREN'S THINTEXT

To feed Warren's Thintext successfully requires only the very lightest pressure from the comber wheels. All that is necessary is the weight of the comber wheels themselves. Too much pressure will jam the sheet to the guides too hard, causing trouble



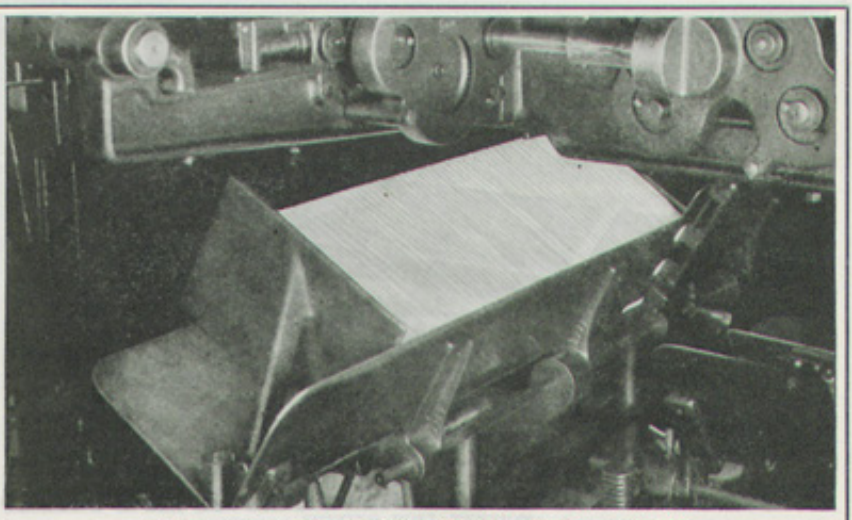
SETTING SLOW DOWNS ON DEXTER FOLDER—FIRST FOLD

This picture shows the method followed by one folding machine operator in setting the slow downs when folding Warren's Thintext. The sheet is placed about ¾" from the guide. Slow downs are set to retard its motion at that point so it will strike the guide easily



SETTING SLOW DOWNS ON DEXTER FOLDER—SECOND FOLD

It is not necessary to slow down the sheet of Warren's Thintext quite as much on the second fold because the folded sheet is thick enough to stand the bump without buckling. Regular adjustment of steel slow downs and wooden drive-up wheels is all that is necessary



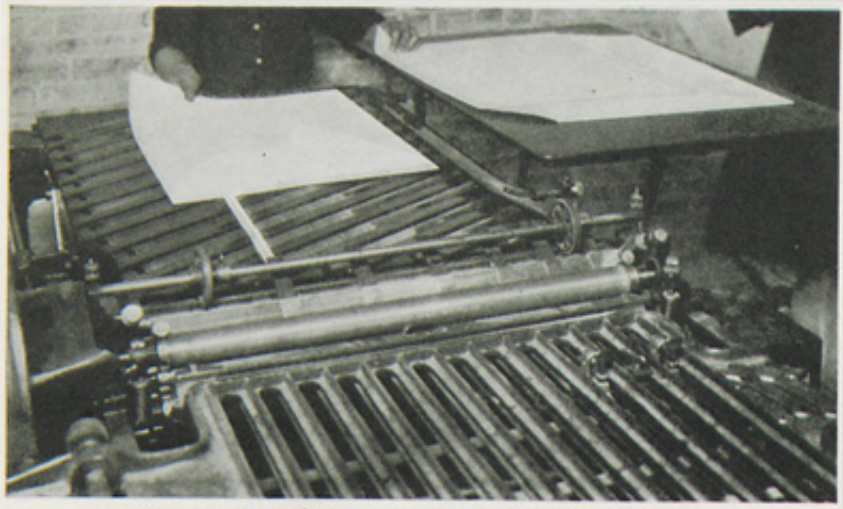
CAREFUL ADJUSTMENT INSURES CONSISTENT DELIVERY

The above picture indicates the consistent and continuous delivery resulting from careful attention to adjustments when folding Warren's Thintext. The jogger full shown was run without stop at a speed of 2,000 per hour. The sheet was 25 x 38—24 lb. Warren's Thintext folded to 6 x 9 booklet size

quite different principle of control than that in the tape type of folder. Evenness of tension in the folder rolls is perhaps the whole secret of success on the Cleveland folder. With a carefully adjusted, *light, even* tension on the folding rolls, Warren's Thintext can be handled with remarkable speed and smoothness on this machine.

Because success in handling Thintext on this folder depends so much upon the evenness of the roll tension, we are showing in the pictures on the following pages some definite comparisons of the results which may be expected from incorrect and correct adjustment of the folding roll tension at various steps through the machine. These pictures will show any operator the spots where trouble is likely to occur, the cause of the trouble and how it should operate when correct roll and brush tension adjustment has been made.

The picture at the top of page 24 shows sheets of Warren's Thintext being laid on the feed table of the Cleveland folder. In this picture you will notice a narrow strip of paper which has been pasted to the feed table running from the first fold roll to the edge of the table next the feeder and parallel with the side guide, about three-quarters of the way across the width of the sheet being folded. This is a stunt practised by many operators to overcome two difficulties likely to arise on this type of feed. It will help overcome a tendency to crowd the side guide and for this reason is particularly helpful in handling large sheets of thin paper, and when feeding a sheet with the



FEEDING WARREN'S THINTEXT ON THE CLEVELAND FOLDER

Pasting a narrow strip of paper the length of the feed table, well toward the edge of the sheet being folded, will help overcome any difficulty on the feed table from a wide sheet crowding the side guide or a narrow sheet twisting forward on the outside end

narrow side to the side guide, it will help retard the end of the sheet away from the side guide sufficiently to bring the sheet squarely to the folding roll. Other operators use a fine wire placed in this same position to accomplish the results mentioned, but the strip of paper seems to be preferred.

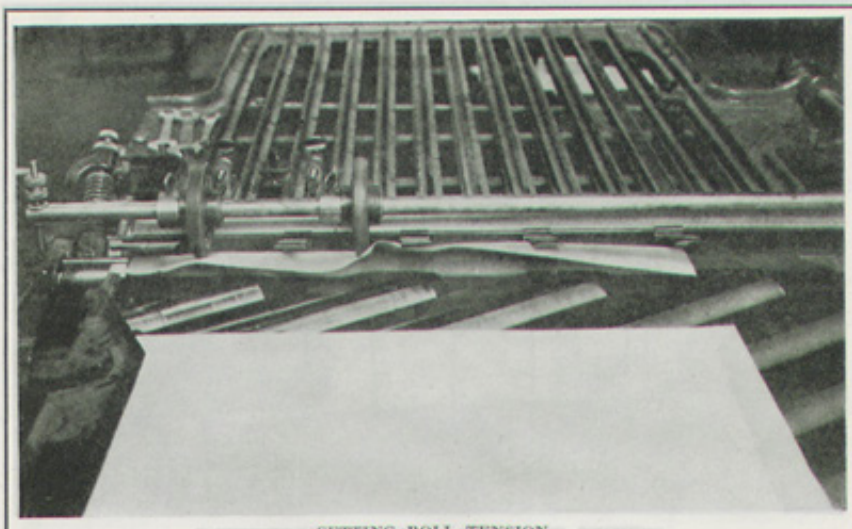
The picture at the top of page 25 shows a sheet of Warren's Thintext going through the first fold rolls and shows the conditions which will arise with uneven roll tension. Note the extreme "waviness" of the back edge of the paper and how the paper is being gradually wrinkled and crumpled toward that end of the roll having the least tension (the right-hand end as it appears in the picture).

In the lower picture on page 25 is shown the folded result of this uneven tension. The sheet shown is the same sheet as that being folded in the top picture.

Results of this kind may be readily eliminated with a little care in adjusting the roll tension, as is shown by the picture at the top of page 26. Here we show another sheet of Warren's Thintext going through the first fold rolls. The only change which was made in the machine adjustments was to make sure there was a light even tension on the fold rolls.

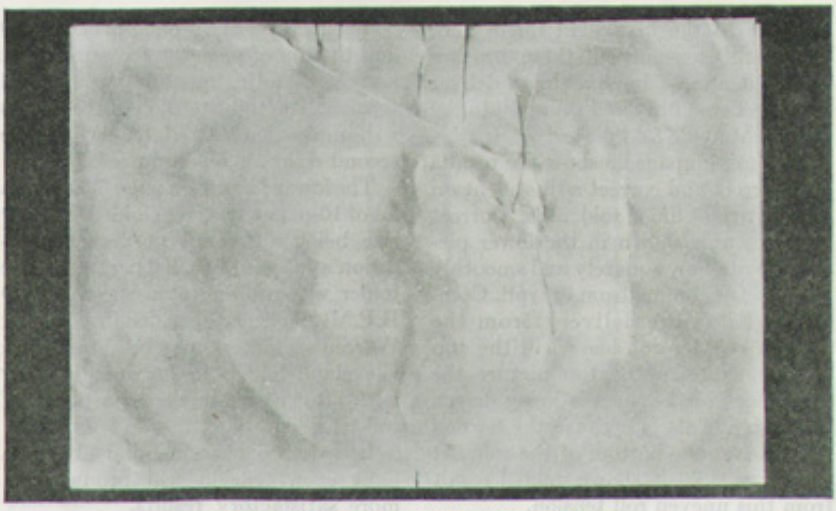
It is well in testing the tension of the fold rolls to test the tension at the extreme ends of the rolls regardless of the width of the sheet to be folded. This will help detect any unevenness that might not be apparent nearer the center of the roll.

On page 27 are pictures showing the results of incorrect and correct adjustment of the brushes on the cross



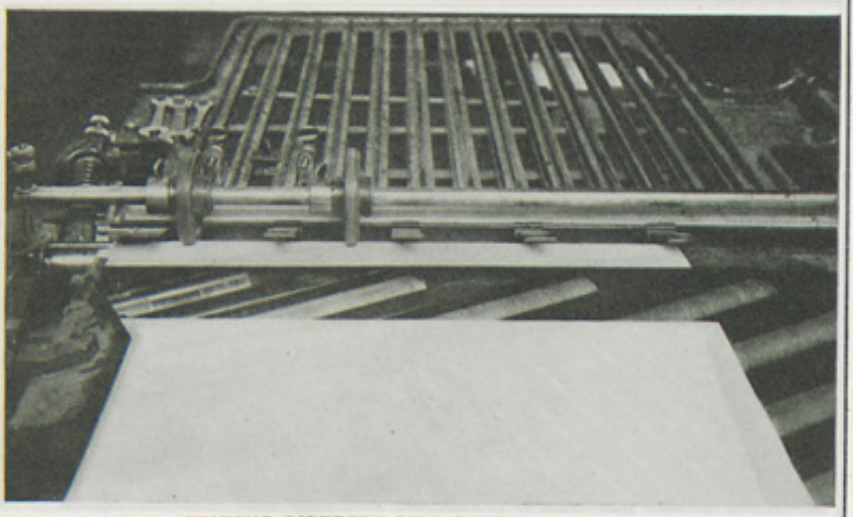
SETTING ROLL TENSION

To satisfactorily handle Warren's Thintext on the Cleveland folder, like all other papers, requires careful attention to the roll tension adjustment. The picture above shows the buckling and wrinkling which will occur with an uneven roll adjustment



THE RESULT OF UNEVEN ROLL TENSION

This picture shows the folded sheet resulting from the uneven roll tension illustrated above. Notice increasing number of bad wrinkles toward back of sheet (edge shown at bottom is folded edge). Proper adjustment will readily overcome this. *See top page 26*



SHOWING CORRECT ROLL TENSION ADJUSTMENT

Just how well Warren's Thintext may be handled on Cleveland folders with only a little attention to correct roll tension adjustment is demonstrated by the smoothness of the sheet being folded in this picture. Use lightest possible EVEN tension for good folding

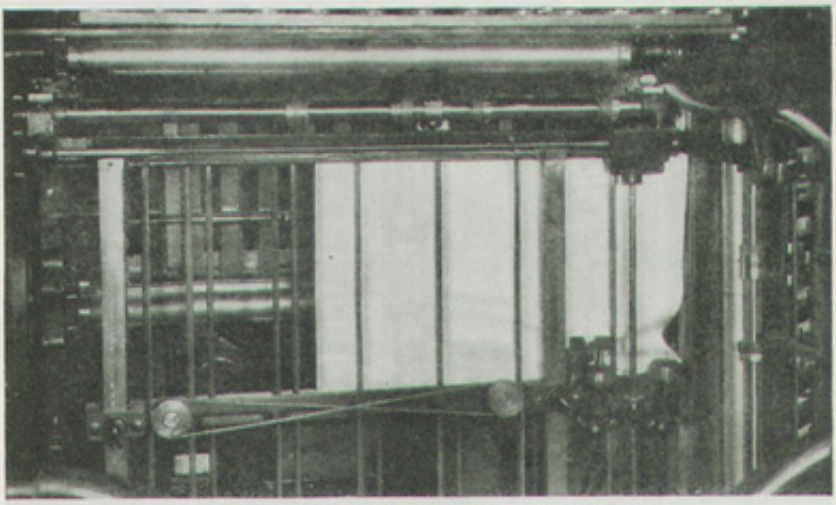
carriage to the first right angle fold. Too tight tension on these brushes makes it almost impossible to deliver the sheet smoothly and squarely to the first right angle fold plate.

Pictures on page 28 show the results of incorrect and correct adjustment on the first right angle fold rolls. Correct adjustment is shown in the lower picture. Note how squarely and smoothly the sheet is coming from the roll. Compare with it the delivery from the uneven roll tension shown in the top picture. Note in the top picture the lower edge of the sheet is being driven out faster. This is because the tension is tighter at the bottom of the roll. At top of page 29 is shown folded result from this uneven roll tension.

The pictures at the bottom of page 29 and the top of page 30 show incorrect and correct adjustment of the guide roll tension. Too tight tension of these rolls will make smooth delivery to the second right angle fold impossible.

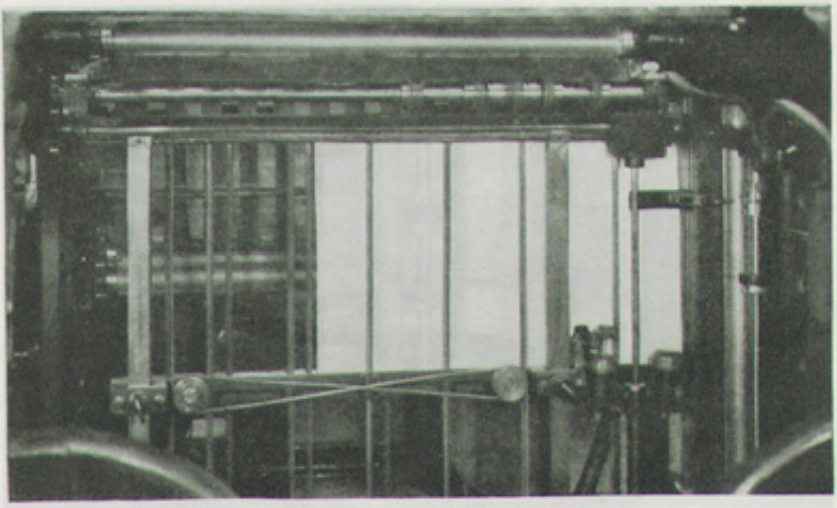
The lower picture on page 30 shows a lot of 16-page signatures folded to a 6x9 size being delivered in perfect condition at a speed of 2200 per hour. The folder was running at a speed of 300 R.P.M. Such performance in handling Warren's Thintext may be obtained on Cleveland folders in any good bindery with proper care in the adjustment of roll tensions.

It is well to bear in mind always a light even tension will produce far more satisfactory results.



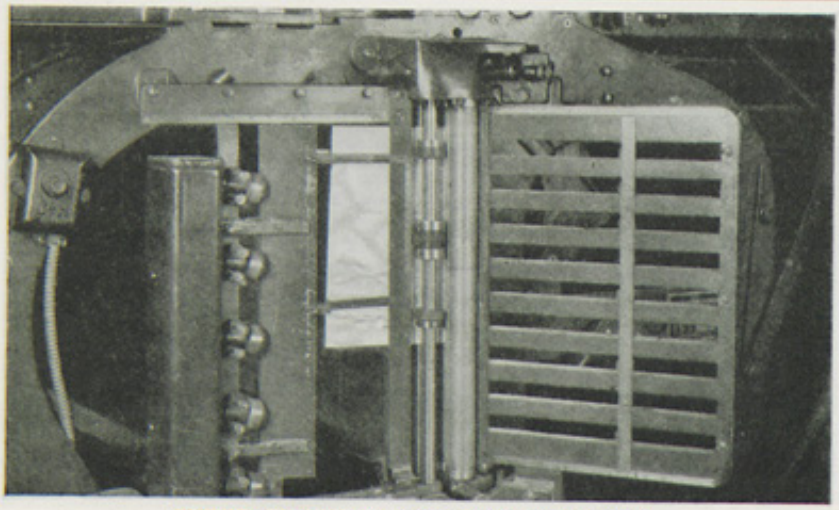
TOO TIGHT TENSION ON CONVEYOR BRUSH

If the brush is set too tight results like that reproduced in this picture are bound to occur, making it impossible to correctly convey the sheet to the first right angle fold. Correct tension at this point will help insure accurate folding



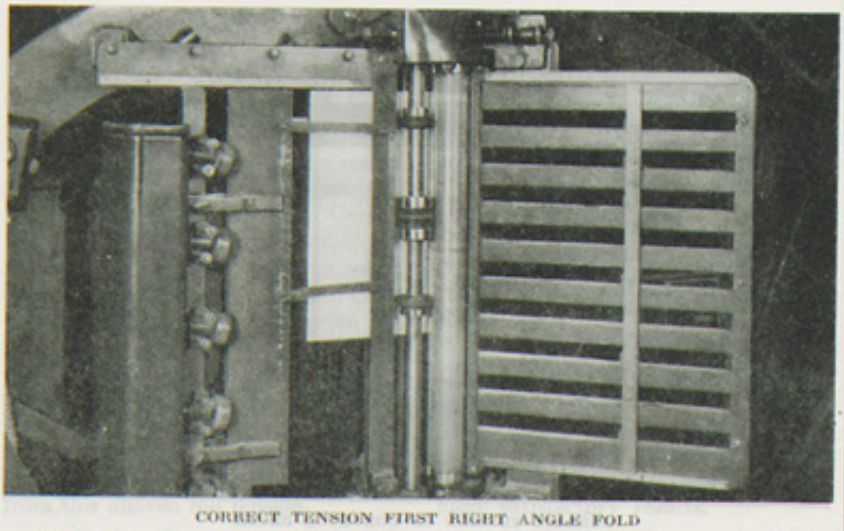
CORRECT TENSION ON CONVEYOR BRUSH

This picture shows how smoothly and accurately Warren's Thintext may be delivered to the first right angle fold if the tension on the Conveyor Brush is properly adjusted. It is well to set all contacts as light as possible



UNEVEN TENSION ON FIRST RIGHT ANGLE FOLD

Here is another illustration of the vast difference a slight variation in roll tension will produce. Note the lower edge is being driven out faster and being creased harder than the top, causing wrinkling and waste. Test roll tensions at extreme ends of rolls

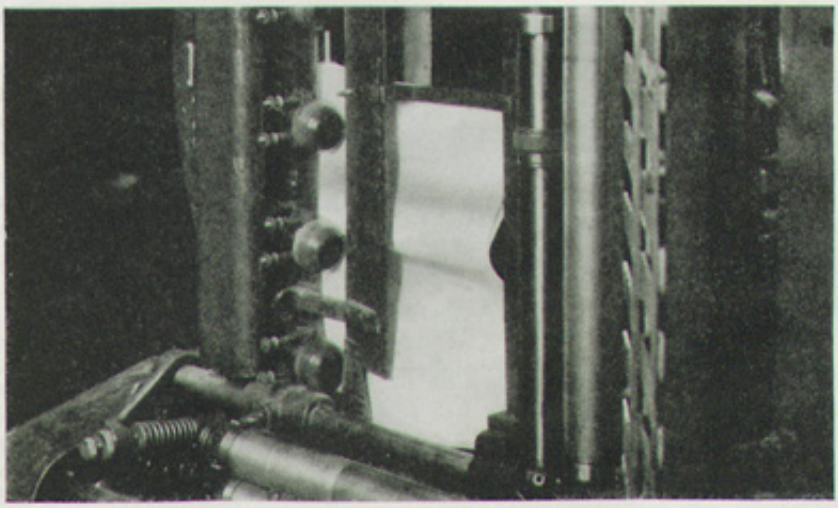


CORRECT TENSION FIRST RIGHT ANGLE FOLD

This picture shows the correct tension for handling Warren's Thintext properly from the first right angle fold. Compare the smoothness with which the sheet leaves the rolls with that in the picture above illustrating results of incorrect tension

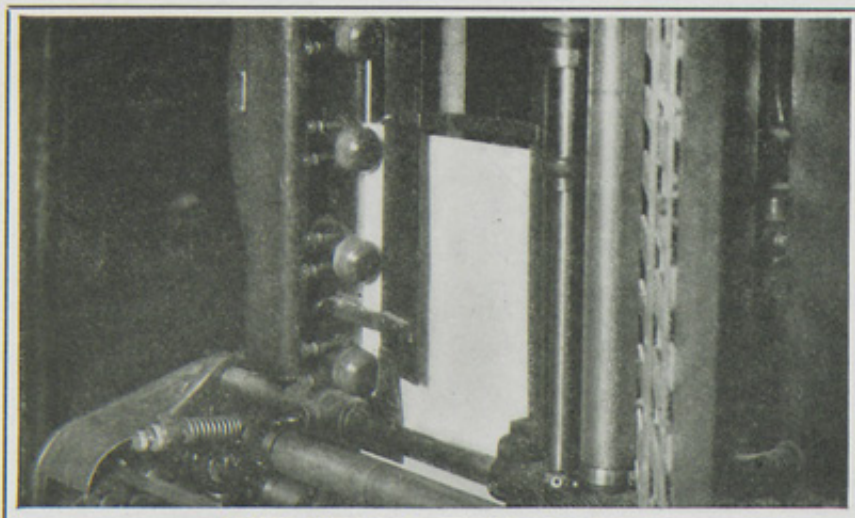
RESULTS OF UNEVEN ROLL TENSION

This shows results of uneven roll tension pictured at top of opposite page. The folded edge is at the bottom. That at the right is the edge farthest from that part of the rolls having most tension. Note this end of the sheet contains most of the wrinkles



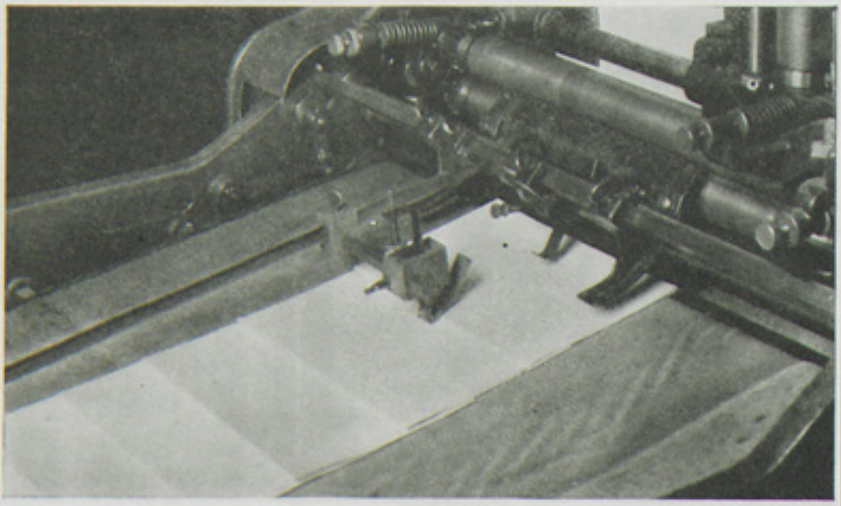
RESULTS OF TOO TIGHT GUIDE ROLL TENSION

Care should be taken to see that tension on the guide rolls to the second right angle fold are evenly and lightly set for Warren's Thintext; otherwise the sheet cannot be smoothly and squarely delivered to the fold guides. This picture shows rolls set too tight



PROPER GUIDE ROLL TENSION ADJUSTMENT

This picture shows how smoothly and squarely Warren's Thintext may be delivered to the second right angle fold with proper setting of the guide roll tension. A light, even tension will work smoother and produce the best results



SMOOTH RESULTS WITH PROPER TENSION ADJUSTMENT

These signatures of Warren's Thintext were being delivered from a Cleveland folder, having all rolls set with light, even tension. Speed of machine was 300 R.P.M. Average production was 2200 per hour with no delays from wrinkled or buckled sheets

SPECIAL INKS REQUIRED FOR WARREN'S THINTEXT

FOR BEST RESULTS INKS USED SHOULD BE FREE FROM PENETRATING OILS

That it is not extremely difficult to handle and maintain good production on Warren's Thintext in the pressroom and bindery has been shown by the experiences already cited of printers who are handling it successfully. To obtain the most effective results on Warren's Thintext, as on all very thin papers, requires, however, most careful attention to details and particularly to the selection of the ink.

Printers most experienced in handling thin papers have found it necessary, in meeting the variety of printing conditions presented by general commercial work on thin papers, to consider the thinness of the paper and use an ink free from penetrating oils.

When inks, weak in tone, or inks containing penetrating oils are used the pressman is forced to carry much more ink than is necessary to cover the plate or type in order to produce sufficient "color." If it happens to be an ink not made for thin papers and one containing a penetrating oil, the oil will soak through the paper, carrying with it some of the coloring matter. This is particularly true when large areas or solids are covered with ink. This is a condition which accentuates the transparency of thin papers. Also, if the job is one printed on both sides of the paper the result is a job which will be, because of the "show through," rather difficult to read, particularly if it contains much small type matter.

With an ink free from penetrating oils and sufficiently strong in color to produce solid tones, black or color as the case may be, a minimum amount of ink is necessary.

When planning work on thin papers, such as Warren's Thintext (India Paper), we suggest that it might always be a good plan to consult the ink maker and be sure he understands what paper is to be used and that he delivers an ink having strong color and free from penetrating oils. High grade work on thin papers can be produced only with inks exactly suited to the paper.

HALFTONE SCREEN FOR WARREN'S THINTEXT

Printing is always better if care is taken to see that halftones are exactly suited to the paper. For satisfactory printing on Warren's Thintext, we recommend deeply etched halftones of 120 line screen. We believe for average subjects 120 line screen will produce the best results though some printers have produced some very fine results with halftones of finer screen.

The halftones used on the Warren's Thintext in this issue of The Warren Standard are all 120 line screen.

WARREN'S THINTEXT

(India Paper)

Carried in stock as follows*, all packed flat, in cases of about 600 pounds.

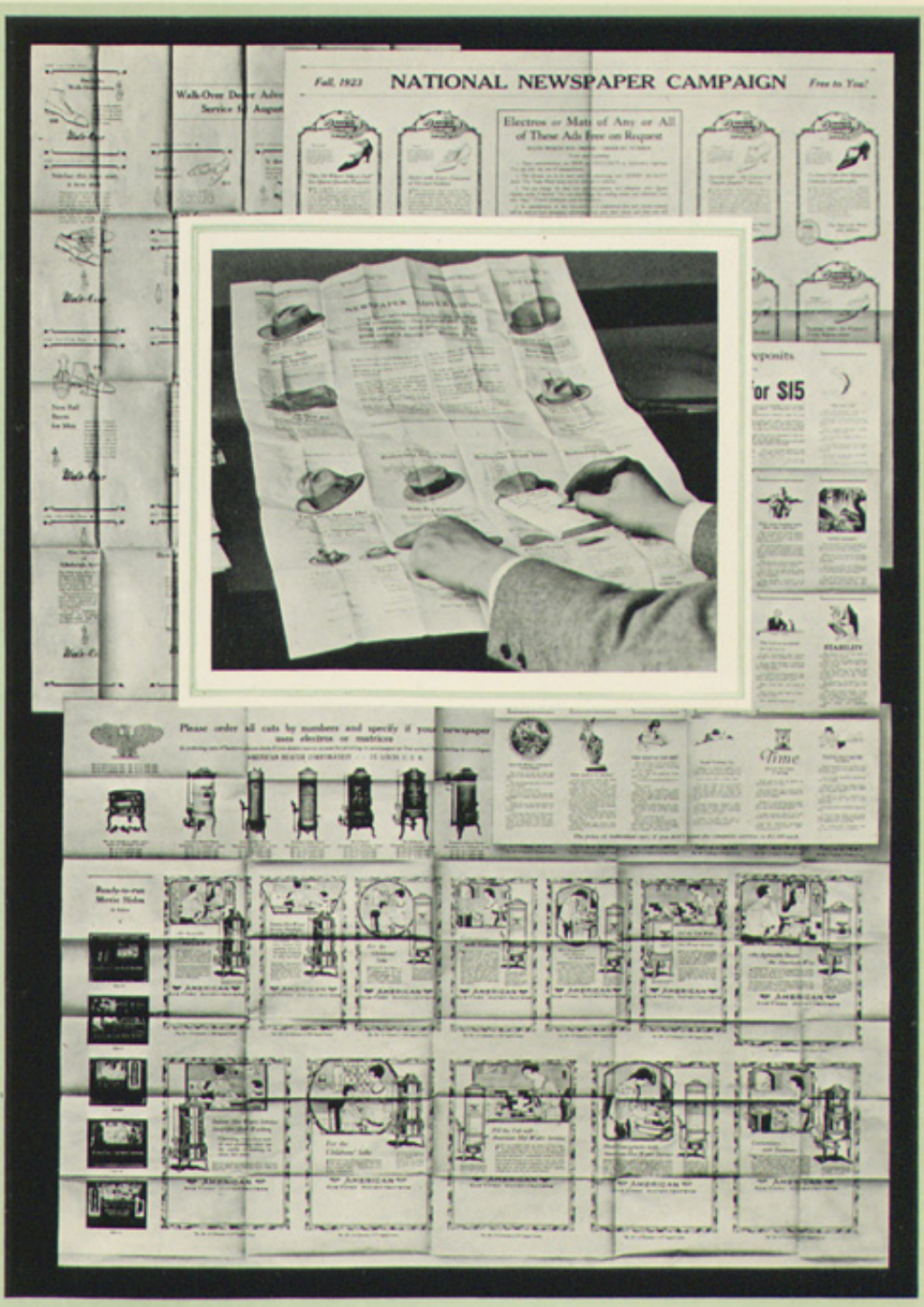
	Substance
26 x 29—16	20
25 x 38—20	20
30½ x 41—26	20
33 x 44—30	20
38 x 50—40	20
26 x 29—19	24
25 x 38—24	24
30½ x 41—32	24
33 x 44—37	24
38 x 50—48	24
26 x 29—24	30
25 x 38—30	30
30½ x 41—39	30
33 x 44—46	30
38 x 50—60	30

*For special making orders, information given on request

better paper
ooo
better printing

Paper—Inside, Warren's Thintext, 25 x 38—30
Cover—Warren's Warrenfold, Ivory, 25 x 38—80
Ink—Inside, Johnson's Black 1483
Cover, Carlson's H.T. Black 4075
Halftones—Inside, 120 Screen
Cover, 133 Screen

Printed in U.S.A.



REPRODUCTIONS OF ELECTROS offered for local Dealer Newspaper Advertising are most effectively displayed if grouped on one large sheet where quick comparisons and selections may be made readily. To do this in a compact and satisfactory way, many advertisers take advantage of the light weight of Warren's Thintext. It makes possible the enclosing of the dealer electro sheets with dealer mail without extra postage. And when received by the dealer the sheet is folded to so small and compact a size it is more likely to be saved and used.

BROADSIDES, MAPS AND INSERTS of large size with big spaces for illustrations and type messages often fill an important place in an advertising campaign. Such material printed on Warren's Thintext can be mailed economically and can also be folded into small space. The forms reproduced above are typical of the great variety of effective arrangements of such advertising material on Warren's Thintext.

DATA BOOKS for salesmen's use will be used more frequently if arranged in a form which may be carried easily. To do this and include all the necessary data is often difficult. Warren's Thintext offers just as large printing page size as heavier papers and because of its light weight makes compact books. A book, one inch thick, printed on Warren's Thintext 24 lb. basis contains 1184 pages.

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THE REFLECTED WORKS