



EDUCATION

The Reflected Works

The Warren Monthly, February / March

1923

sappi etc



The Warren Monthly, February / March

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 February / March 1923 issue of *The Warren Monthly* 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.

1923

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THE
WARREN
MONTHLY

FEBRUARY AND MARCH - NINETEEN TWENTY THREE

Dust and Dirt
we have with us always





ANY sheet of paper that lays around any printing plant for twenty-four hours will give plenty of evidence of the fact that the air is constantly full of particles of dust and dirt. This pile of paper had so much dust on it that streaks are left where the fingers were drawn over the top

THE WARREN MONTHLY

Published in the interests of THE WARREN ASSOCIATION, with information about the Mill, Headquarters, Warren Distributors, and allied activities

S. D. WARREN COMPANY, BOSTON

FEBRUARY and MARCH, 1923

Dust and Dirt We Have With Us Always

PRINTERS, paper manufacturers and ink manufacturers are constantly battling with dust and dirt. These things do not help good printing when mixed with ink and paper.

Dust and dirt enter printing plants in many ways that are obvious. They also enter in some ways that are little suspected.

Dust and dirt enter a pressroom in these ways:

They are blown in through windows and doors.

They are tracked in by everyone entering the plant.

They are carried in in cases and bundles of paper.

What is known as cutter dust flakes from the edges of the paper and works in between the sheets.

Cutter dust is scraped from the edges of sheets of paper being fed into the press and unless taken care of is mixed with ink.

Lint and dust, thrown off from the edges and surfaces of sheets of paper, gather on the presses and rollers and are carried everywhere by the air.

*Pedestrians
can't stop all the dust
that blows about*





To avoid dust and dirt in unpacking paper, first place case right side up. Remove nails from top boards as shown in upper picture. Then loosen side boards as shown in lower picture. For next steps see page 6

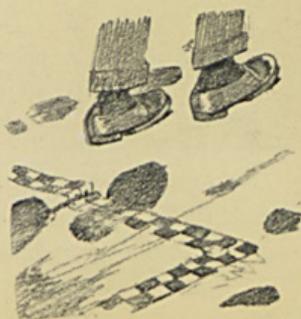
THE TEST FOR DUST AND DIRT IN PRESSROOMS

IF you have any doubts about the amount of dirt and dust that is always present in any part of any office or printing plant in the country, place a clean sheet of white paper on a desk or table. Let it lie undisturbed for twenty-four hours. Then run your fingers across it. You will then have a fair idea of the amount of dust and dirt that is constantly sifting on to rollers and paper during the process of printing.

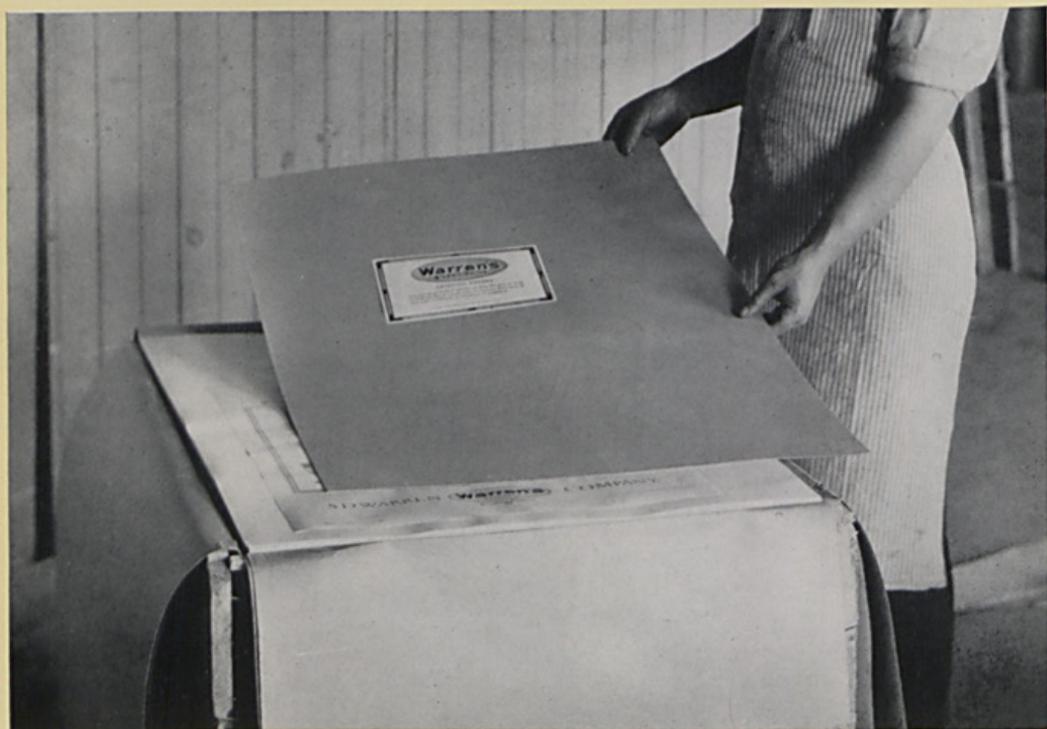
This is something that it is almost impossible to overcome. An air-washing system might correct it, but only in part.

PART OF THIS DUST AND DIRT CAN BE ELIMINATED

THERE are three kinds of dust and dirt that can be very nearly eliminated by the proper handling of paper when cutting it or printing it. These are the dust and dirt that are picked up by paper in transportation; the dust that is formed in cutting, and the dust and lint that are found on the surfaces of some kinds of paper.



*Sherlock says.
"This man has
been walking on
a muddy street"*



LAY wrappers back carefully so that dust, cinders, broken particles from boards and dirt of all kinds fall away from the case as shown in top picture. Carefully lift the sheet of board, packed at the top and bottom of every case of Warren Paper, to remove any additional dirt which may have sifted in under the wrappers. For next steps see page 8

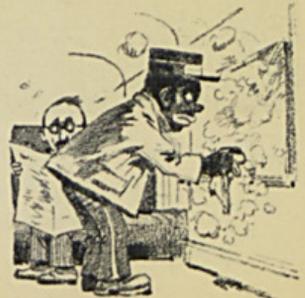
HOW PAPER IN TRANSPORTATION PICKS UP DIRT

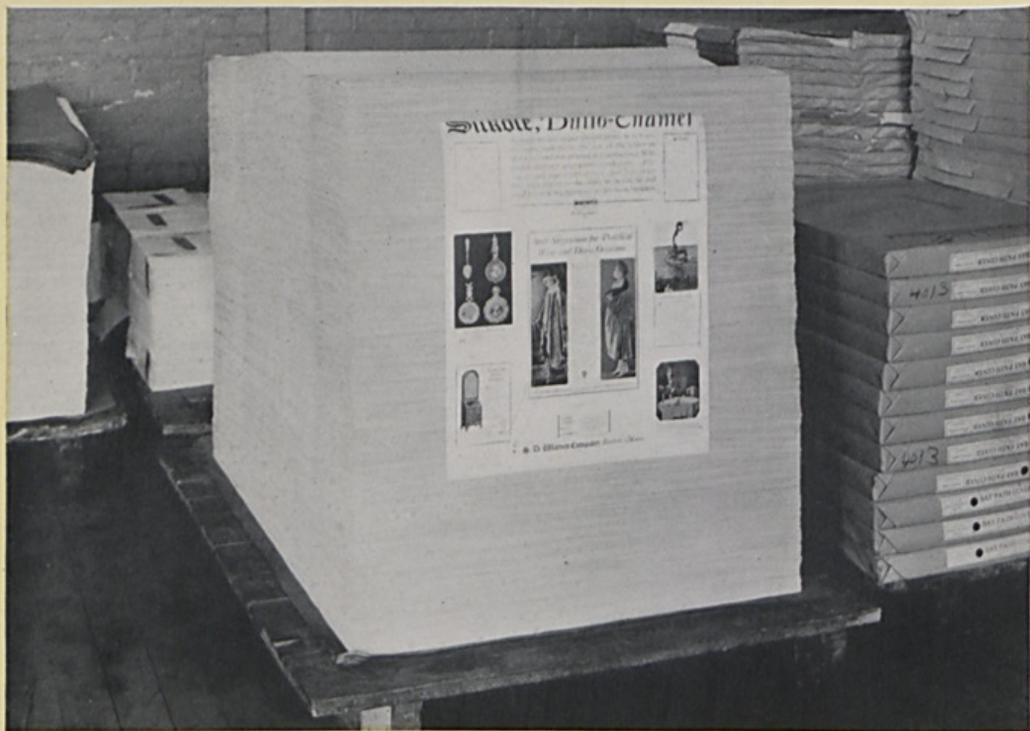
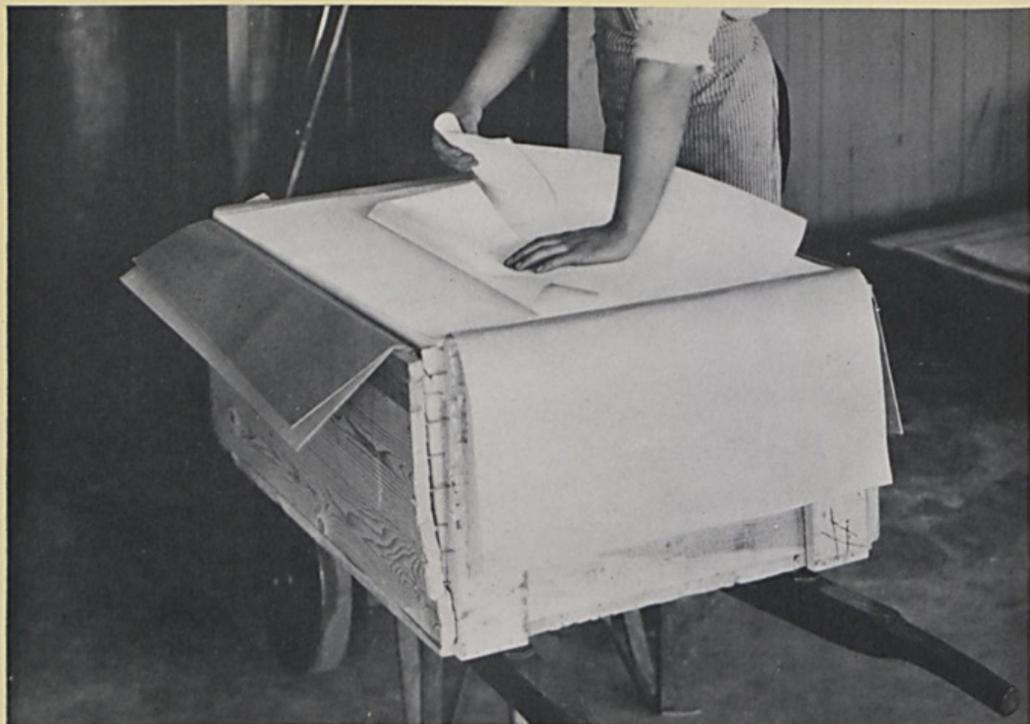
PULLMAN cars are well built. In the winter time they are as nearly air-tight as it is practicable to make them. Yet if you watch an efficient Pullman porter on a good railroad, you will see him busy with a cloth, wiping dust and small cinders from the window sill. If you rub a white handkerchief over the window sill ten minutes after the porter has wiped it, you will get some idea of the amount of dirt that sifts into a Pullman car.

A freight car is far from being as air-tight as a Pullman car, even when the doors are carefully battened as they are when loaded with Warren Paper. Consequently cinders from the engine and dirt from the roadbed are constantly sifting into the car. Cases become covered with dirt. Nothing except hermetical sealing will keep this dirt out of a case.

It sifts between the boards onto the case lining. Even when cases are tightly packed, cornerpieces of waterproof wrapping set in for protection, and linings well overlapped, the cinders and dirt may sift down between the overlapped lining onto the top of the paper and down the sides. In some instances, when cars are bumped around a great deal, the dirt that

*The porter who
dislikes dirt is
the busiest man
on the train*





If sheet of paper on top of case carries dust or dirt, fold it up so that no dirt falls down on to sides of paper in case. See top picture. After paper is piled insert Test Sheet in side of pile. Order number on this sheet identifies paper in case of any complaint

sifts down onto the edges of the paper will sift in between the sheets, no matter how tightly it is packed.

It will be readily seen, therefore, that the unpacking of a case of paper is not a matter to be undertaken carelessly if dirt is to be kept out of paper.

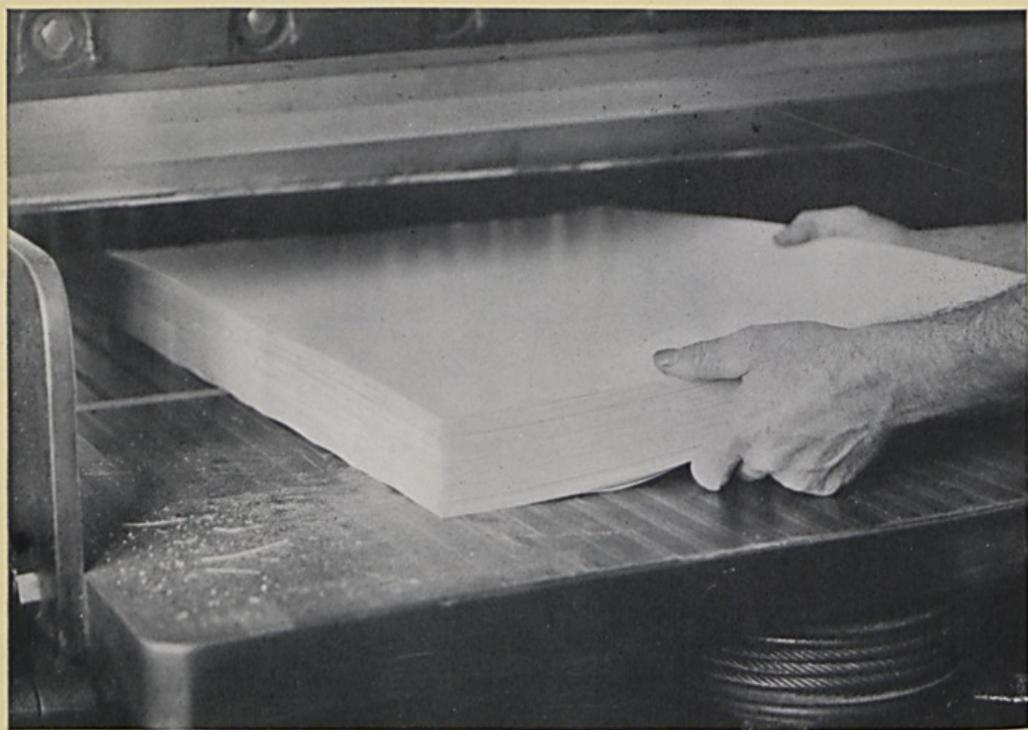
UNPACKING A CASE OF PAPER
SO AS TO AVOID DIRT

PICTURES on pages 4, 6 and 8 show the logical steps in unpacking a case to avoid letting dirt fall onto the paper. They are as follows:

- 1st —Be sure that case is right side up.
- 2nd —Remove top boards.
- 3rd —Loosen side boards.
- 4th —Lay lining papers back carefully so that any dirt on top falls away from the case.
- 5th —Remove sheet of board packed underneath wrappers.
- 6th —Remove the printed test sheet and save to insert in pile of paper going to pressroom. This enables the mill to check back any trouble or complaint, as it carries the mill order number.

*The up-to-dale
housewife now
carries dirt away
in a bag*





THESE pictures show how particles broken off from the edges in cutting and lint accumulate on cutter. Unless this dust is wiped away, much of it is picked up by edges of paper as it is fanned and pushed against the side plate

7th —If any dirt appears on the first sheet in the case, fold it up carefully and throw it into the waste-basket, so that dirt will not be carried into pressroom.

8th —When piling paper onto truck from the case, examine sides and ends of pile for dust and dirt. If any dirt shows, dust sides of pile to remove dirt so that when paper is lifted onto press or onto cutter, dirt will not fall on press or sift between sheets in feeding or cutting.

9th— Insert test sheet in pile as shown on page 8.

The fullest co-operation on the part of our printer customers in this matter of opening cases will avoid the possible spoilage of many plates and printing jobs.

"CUTTER DUST" SPOILS MANY PRINTING JOBS

THE pictures on pages 10 and 12 show how "cutter dust" accumulates on the paper cutter. It gathers in the cutting of coated paper as well as in the cutting of other grades, and it is always a factor to be reckoned with. In the cutting of coated papers, especially if the knife happens to be slightly dull, small particles of coating are broken and flaked from the edges of the paper.

*They claim
they're taking away
all the ashes*





If dust is gathered up on the cutter as shown on page 10, it sifts down between sheets of paper when the lift is winded and jogged as shown here. If dust is found on sides of lift, it should be shaken off before the jogging operation

These particles not only gather very rapidly on the cutter, but some are left hanging on the edges of the paper. When the paper is "winded" and jogged, these particles sift down onto the surface of the sheets of paper, and unless they are wiped off by the brushes on the press, fall on the plates, type and rollers, and spoil the appearance of the job.

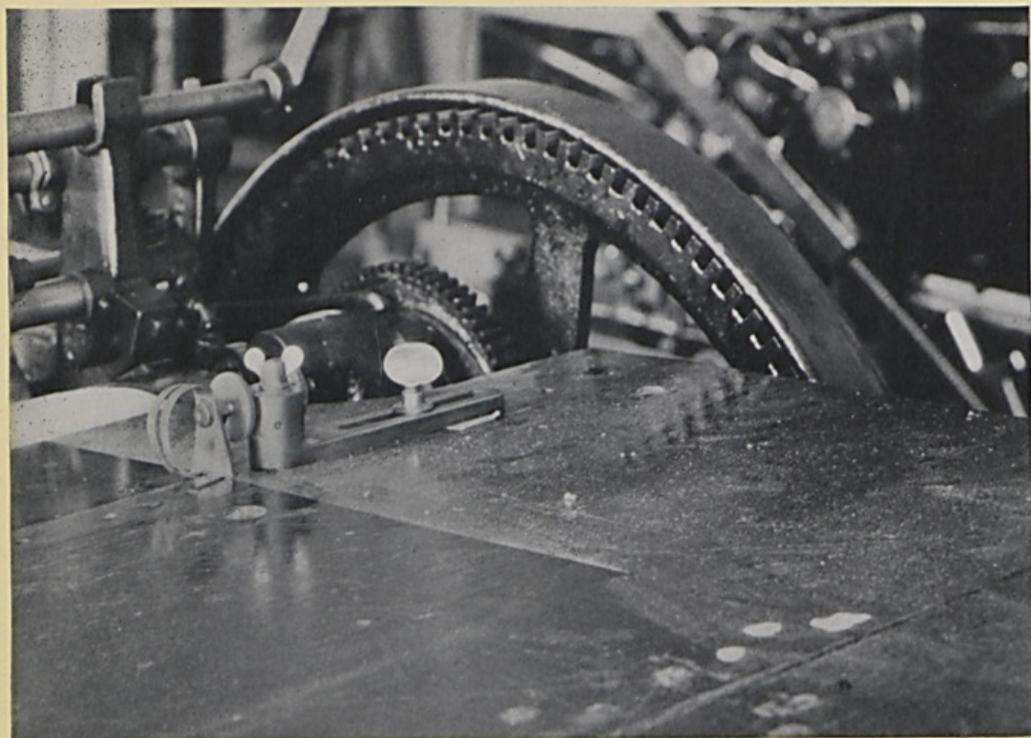
HANDLING PAPER AT THE CUTTER TO AVOID DUST

THE pictures on pages 10 and 12 not only give some idea of the amount of dust that accumulates during the cutting operation, but they also give a fair idea of how cutter dust can find its way between sheets of paper during the process of cutting.

Unless care is used, every time the operator shoves a lift of paper across the cutter, some dust is picked up by the edges of the paper. When the paper is winded and jogged, the dust sifts down into the lift. Whether the lift is jogged or not, considerable dust is picked up, unless the dust is carefully wiped from the cutter as it accumulates. And if picked up at the cutter, it must be eliminated on the press.

*The office boy
can help a lot in
stirring up dust*





Press brush **U**PPER picture shows how cutter dust and lint accumulate on feed-board of press. Much of it also falls on rollers and ink plates. Lower picture shows brush in fine printing plant. Note how it is loaded with dust and lint gathered from paper. Unless cleaned soon, dust will drop onto printing form

HOW DUST AND DIRT ACCUMULATE ON THE PRESS

EVERY printer is familiar with the piling up of lint and cutter dust on the press. The upper picture on page 14 shows a feed-board after paper has been fed over it for a few hours. It is an easy matter to see how dust and dirt can get onto rollers and ink plates, no matter how careful the pressman is.

TO GET RID OF "CUTTER DUST" CAREFUL ATTENTION IS NECESSARY TO BRUSHES ON PRESS

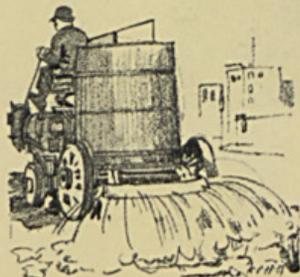
ON the lower half of page 14 is a picture of a cylinder press taken from such an angle that the brush can be easily seen. Brushes similar to this are put on presses for two reasons:

First, they remove any loose particles from the surface of the paper as the cylinder revolves.

Second, they help to hold the sheet of paper against the cylinder so that it will lie flat to receive the printing impression.

You will observe that the brush shown is filled with lint and cutter dust. If the pressman should con-

*One way to keep
dust down is to
make mud of it*





THESE pictures show cleaning of press brush. Press brush is scrubbed back and forth with hand brush. After this it is tamped with back of hand brush to remove all loose particles before putting back on press

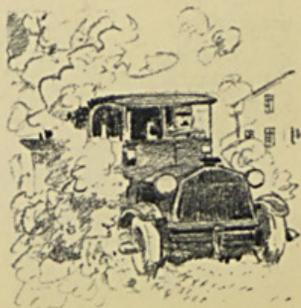
tinue printing with the brush in this condition, the result would be that the dust being picked off the surface of the sheets would drop onto the plates in the printing form, bringing about just such disturbing results as are shown on pages 20, 21, 24 and 25.

On page 16 are two pictures which show how brushes can be cleaned. How often this should be done, depends entirely on how free the paper is from dust and dirt.

It will be seen that the cutter can save the pressman considerable trouble by keeping the cutter free from dust, so that it will not gather on the edges of the paper and be jogged down onto the surfaces of the sheets.

Care on the part of the man who opens the stock, the cutter and the pressman will help the cause of good printing immeasurably. If each man who handles the paper before it is printed and during the printing does his part, it saves many wash-ups on the press and insures the customer a fine job.

The hustling truck driver removes lots of dirt—via the air



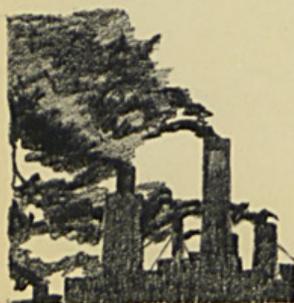
WHAT DUST AND DIRT DO TO PLATES

ON page 20 is a reproduction of a sheet printed from a halftone plate on which cutter dust has fallen. Sometimes this is mistaken for picking of the stock or for holes in the surface of stock.

On page 26 is a reproduction of a halftone print from which the surface of the stock has been picked with an ink that was too "tacky." Only examination with a magnifying glass will tell whether the poor printing results have been caused by cutter dust, "picking," or holes in stock. Holes in the surface of paper are hard to find. Examination of the unprinted surfaces with a strong glass, however, should show holes similar to those on the printed surface.

The following paragraph explains the difference in the appearance of printing spoiled by cutter dust and that spoiled by picking.

On page 21 is a magnified reproduction of a sheet printed after cutter dust has fallen on it. On page 27 is a magnified reproduction of a sheet from which the surface has been lifted by a too "tacky" ink. If you compare this with the magnified reproduction of the cutter-dust impression, you will notice that the white holes in the former are flat and white, while the holes



*What goes up
must come down —
soft coal smoke
is no exception*

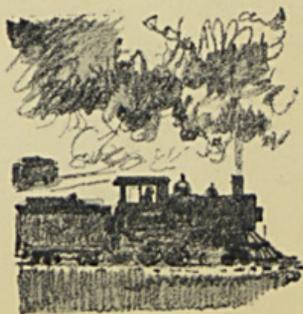
in the latter are full of shadows. These shadows show that some of the fibers in the body stock have been pulled up by the coating when the coating itself was being lifted from the body stock. If the coating had been weak, no pulled fibers would show.

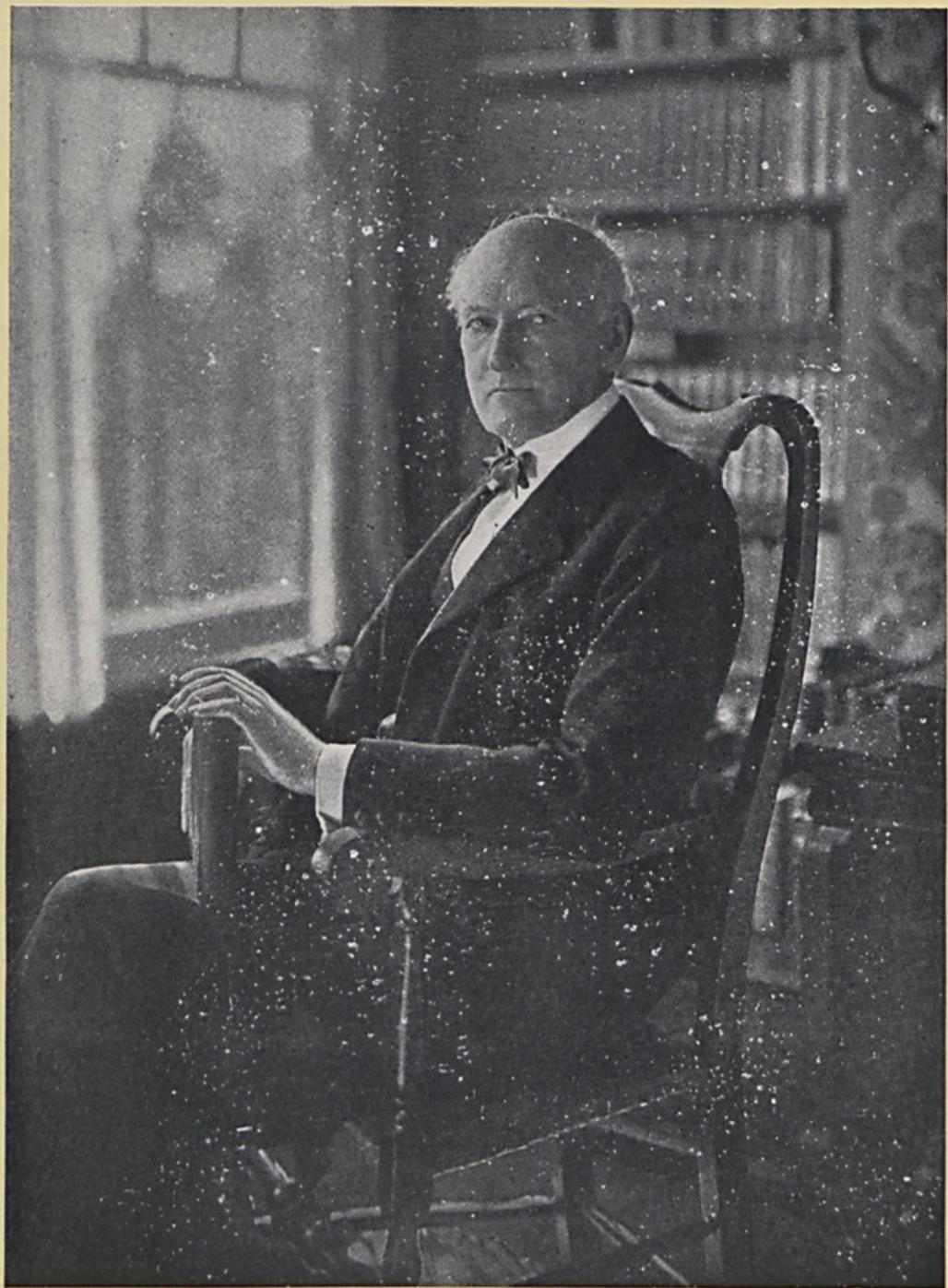
Cutter-dust indications can be determined by examining first spoiled impression. White specks similar to reproduction on page 20 will probably be found.

The specks on the first printing will be white, because the dust usually falls from the brushes on the press onto the plates and type after they have been inked. This dust on plates or type holds the sheet away from the plate so that no printing appears on the spots covered by the cutter dust. As the printing goes on, the cutter dust accumulates on rollers and becomes embedded in the spaces between the dots in the halftones. These spots take the ink just the same as the halftone dots, and the result is that the reproduction is full of black spots, as shown on page 24.

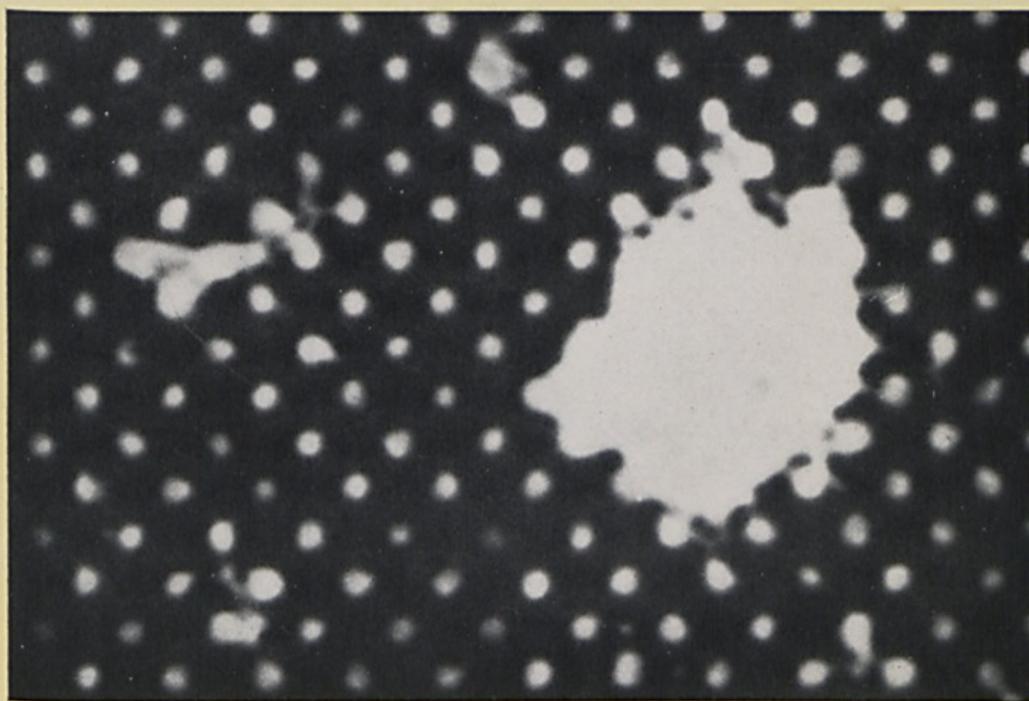
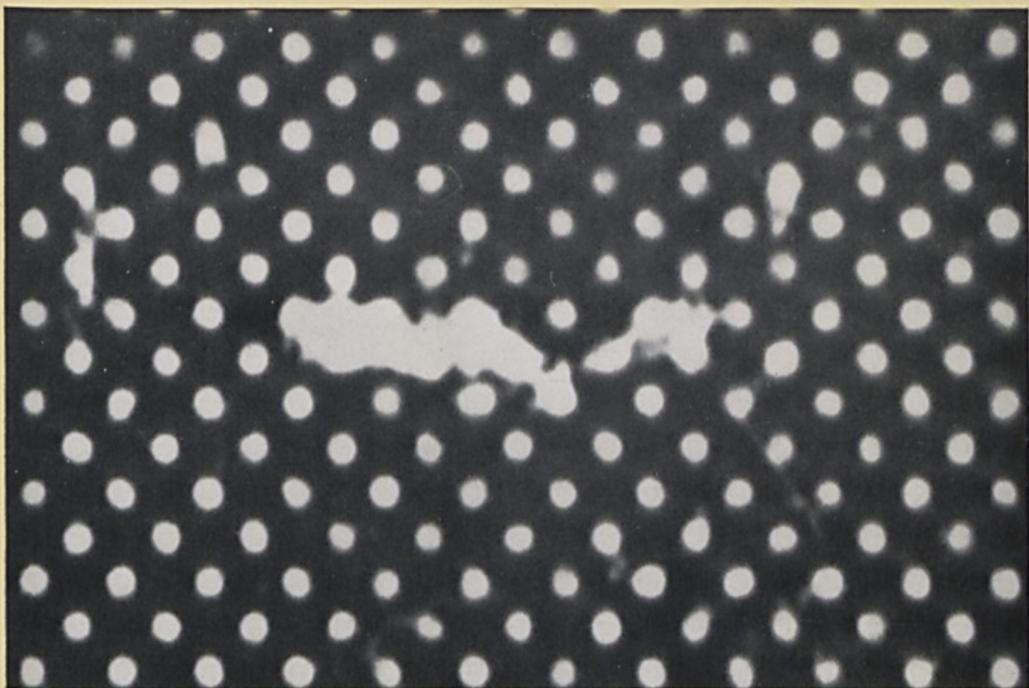
On page 25 is a magnified reproduction of a plate filled with dirt. You will notice that dots in many places are joined together by the particles of dirt embedded in the open spaces. As has been pointed out, such results can be avoided by careful attention to the elimination of dirt in each handling of the stock.

*A good healthy
engine can obliterate
any landscape*





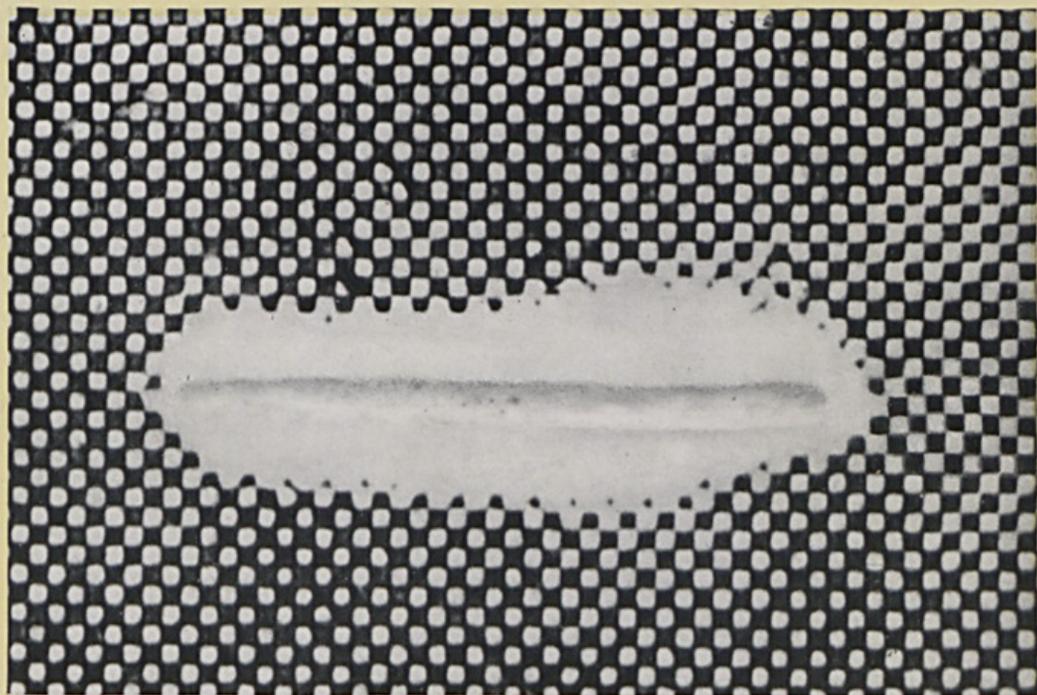
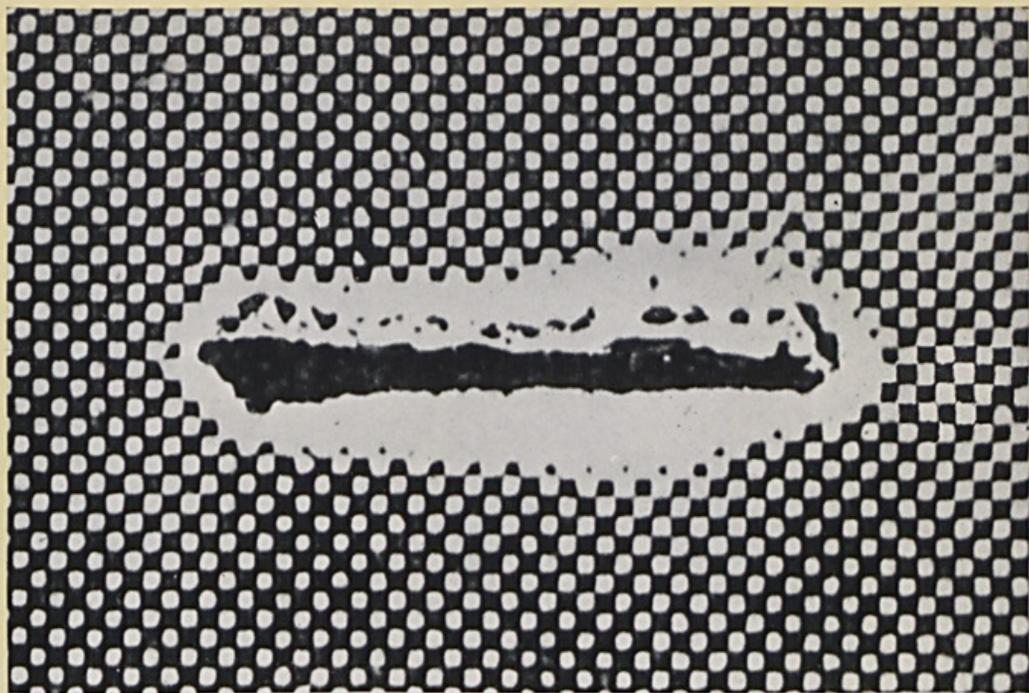
THIS is a halftone reproduction of a printed result from a plate on which cutter dust and lint have fallen after the plate has been inked. The particles of dust cover the ink so that white spots appear all over the surface. See magnified section opposite



THIS is a magnified section of the reproduction on the opposite page. Comparison of this print with that shown on page 27 shows the difference between a print from plate printed with cutter dust lying on the surface and a print from which the surface of the stock has been pulled by stiff ink. The white spots on the reproduction on this page show the flat white surface of the stock underneath. The spots in the reproduction on page 27 show not flat surface but fibers pulled up when the coating is lifted from the surface



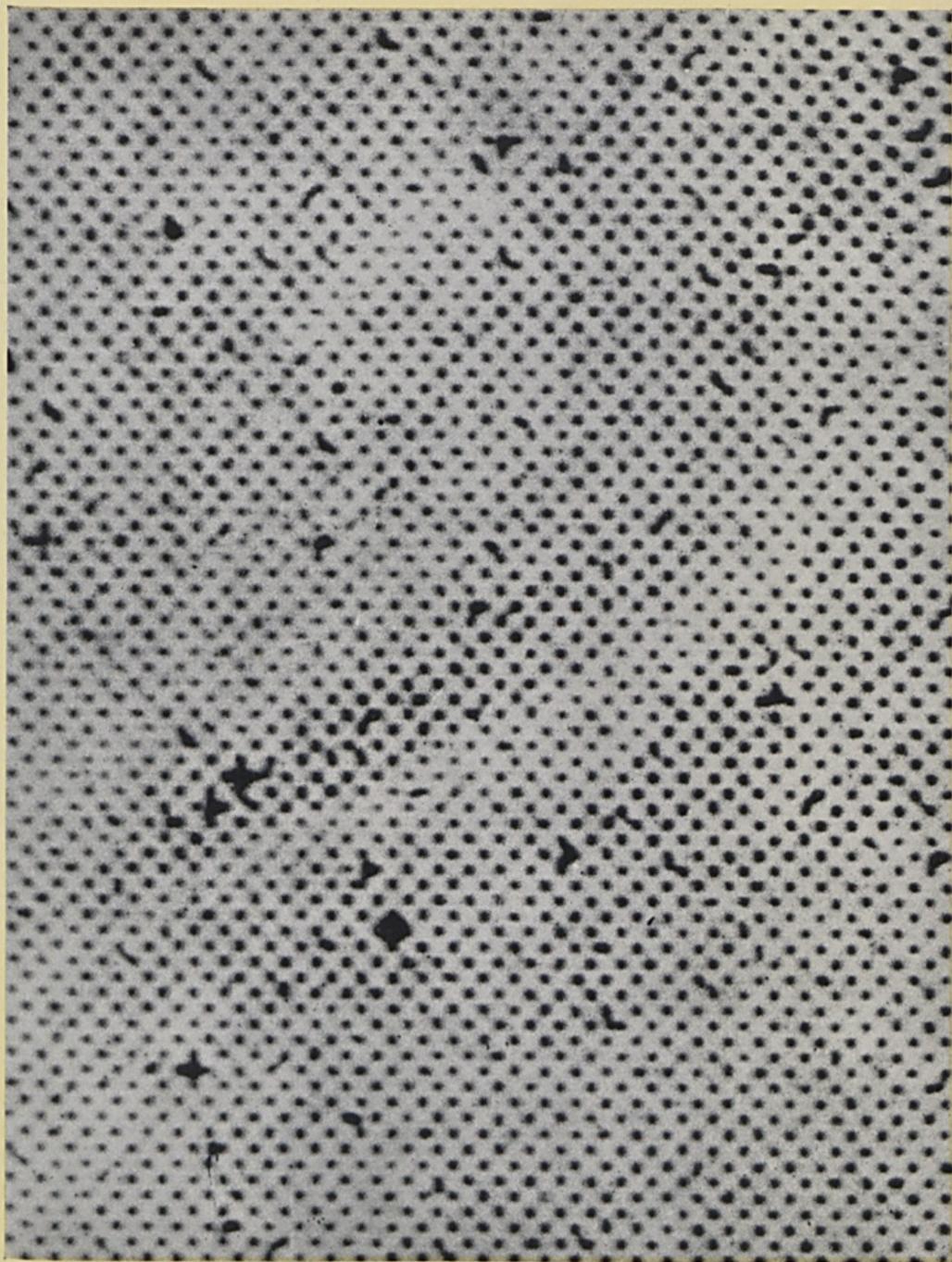
THIS is a halftone reproduction of a printed result from a plate on which a hard substance (a brush bristle in this instance) had fallen—see upper right-hand corner. The hard substance coming between the plate and the paper holds the paper from the plate, making the white circle around it. See magnified section at top of opposite page



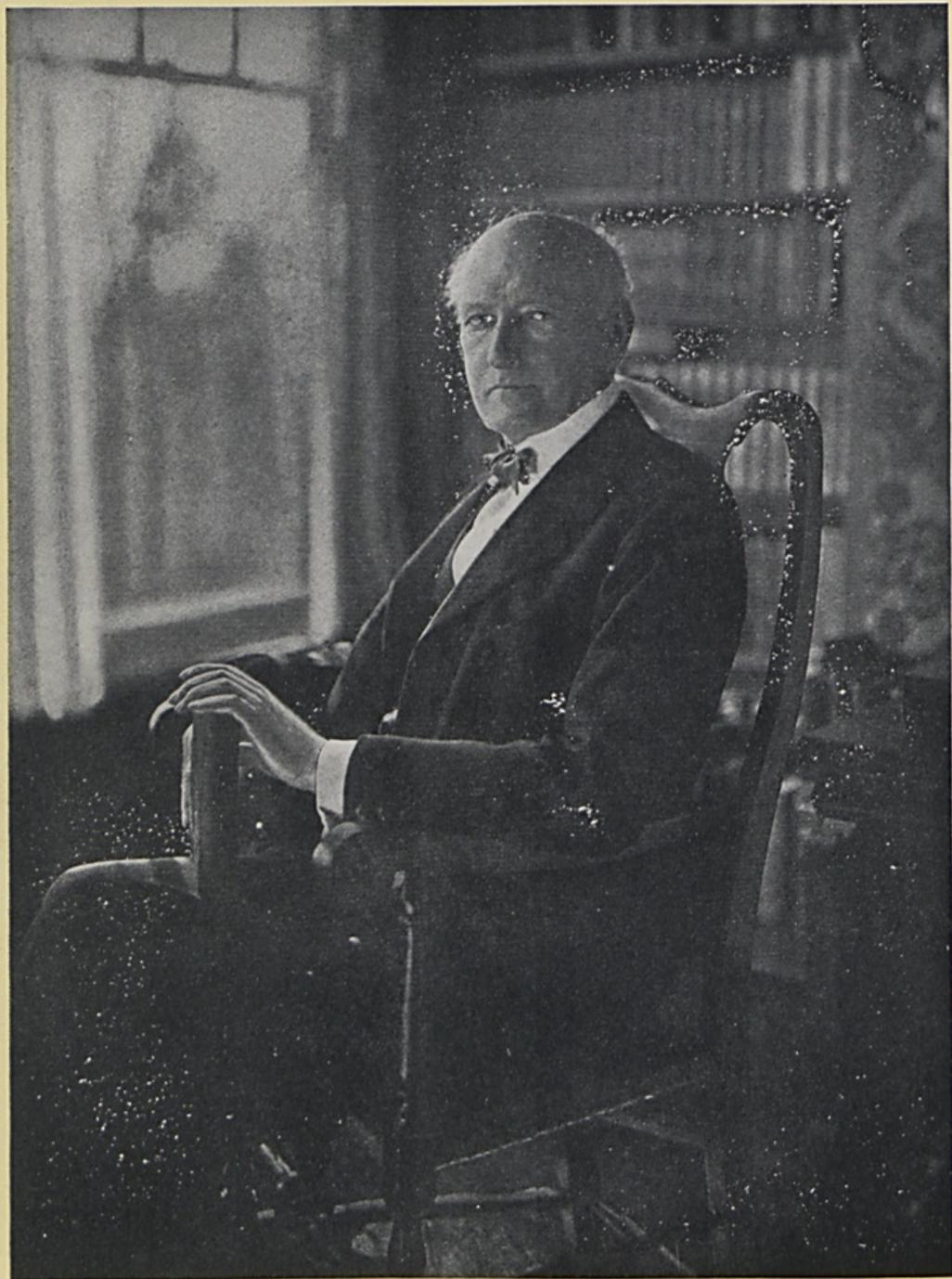
THE magnified section at the top of this page shows more clearly the printed result caused by a hard foreign substance adhering to a halftone plate, as shown opposite. The magnified section below it shows the indentation made in the paper by the hard substance. In this case it was transferred to the paper with the printing impression, but was removed before the sheet was photographed. Often such material will adhere to the halftone plate and reproduce on a number of sheets as shown on page 22. These magnified sections and those on page 21 show the two most common causes of white spots in halftone reproductions



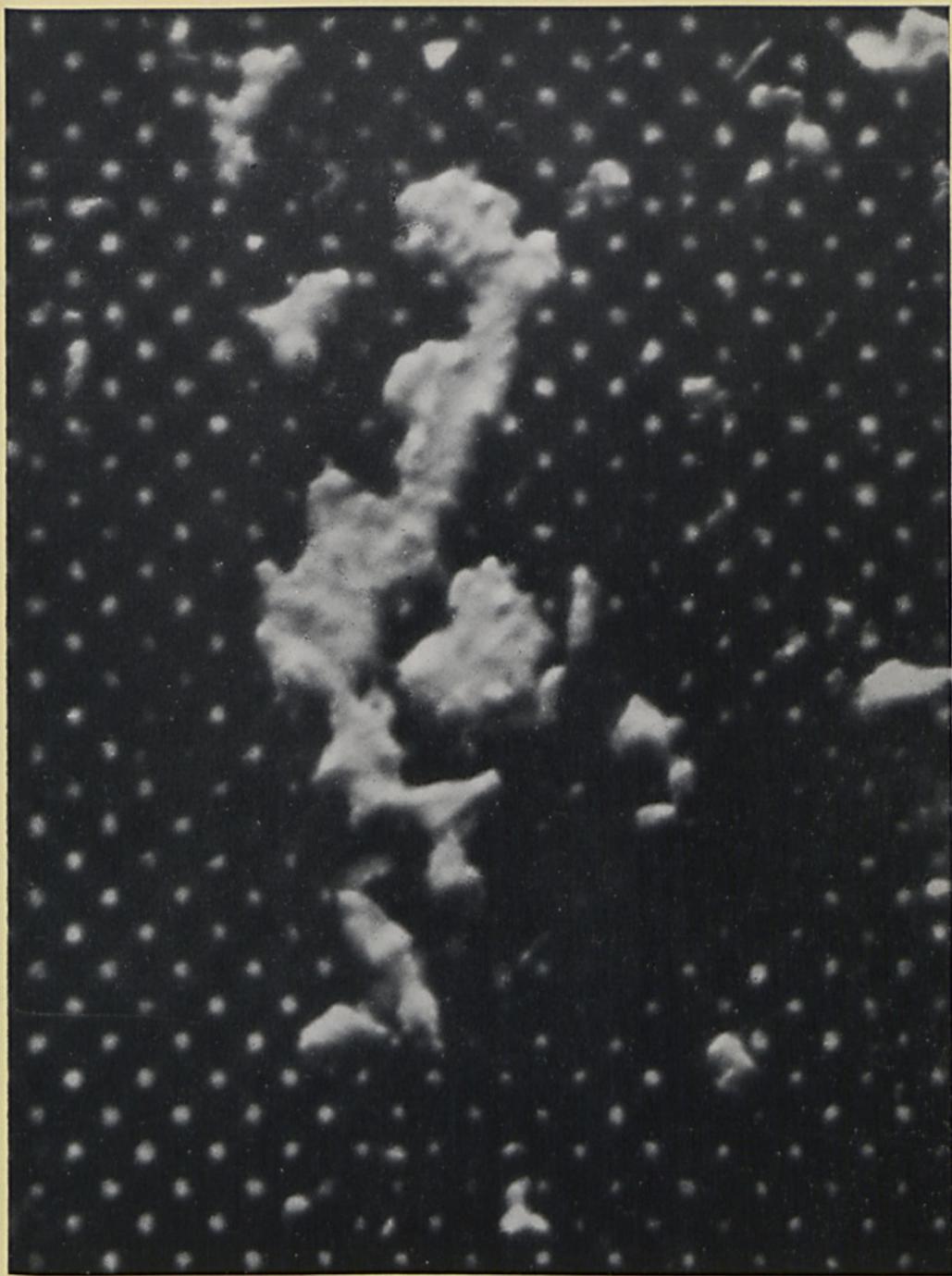
THIS is a reproduction of a halftone print reproduced from a plate into the screen of which cutter dust and dirt were embedded. The black spots are caused by spots of dirt between the dots in the halftone. The rollers deposit ink on the wedged-in dirt and the ink is transferred to the sheet which is being printed. Similar spots are sometimes caused by ink pigment, but eliminating dust and dirt on the press will avoid one source of this kind of trouble



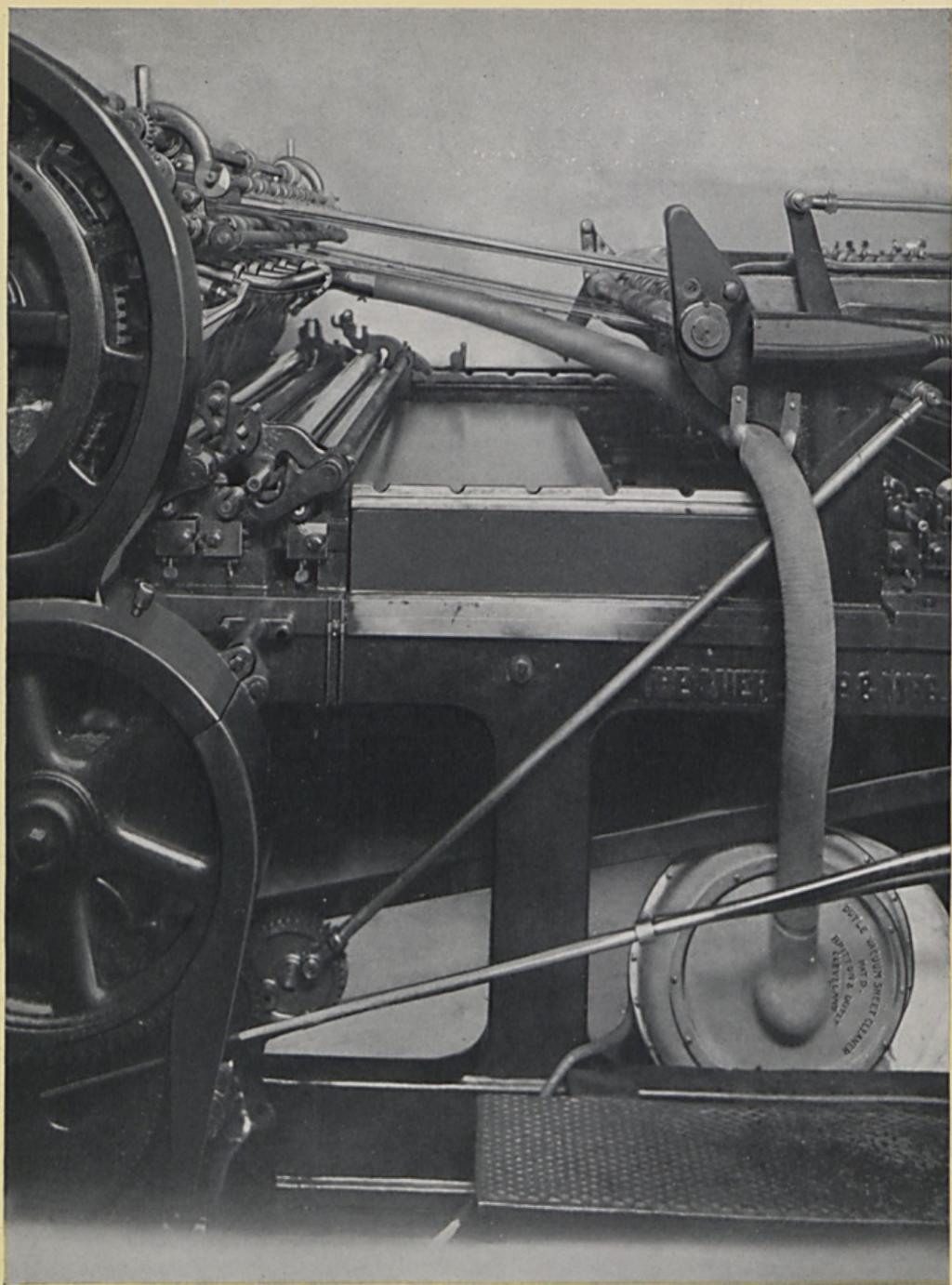
THIS is a magnified section of the reproduction shown on the opposite page. It shows how the dirt embedded in the spaces between the dots of the halftone takes the ink from the rollers and deposits it on the paper causing the picture to be spotted with black



THIS is a reproduction of a printed sheet from which the part of the surface of a coated stock has been pulled by a very stiff ink. "Picking" that is caused by too stiff ink instead of by weak coating can quickly be detected with a magnifying glass. When a stiff ink pulls the coating from the stock, the fibers of the body stock will be pulled up as shown in magnified section on opposite page



THIS is a magnified section from reproduction on opposite page. You will notice that the large, irregular spots show certain shadows which indicate that the smooth surface coating is gone from the stock, and that the coating when being lifted from the stock has pulled up with it the fibers of the body stock



THIS shows a Doyle Vacuum Sheet Cleaner attached to a cylinder press. Picture is shown through courtesy of Britton & Doyle, manufacturers of pressroom appliances, of Cleveland, Ohio



A VACUUM CLEANER
TO REMOVE DUST AND DIRT FROM PAPER
DURING PRINTING PROCESS

THE picture at the top of this page was furnished by Britton & Doyle of Cleveland, Ohio, makers of pressroom appliances. They say that this is an actual photograph of the dirt gathered by the Doyle Vacuum Sheet Cleaner in two days' run of the Copperplate Section of the *Cleveland Sunday Leader*. It gives some idea of the amount of dirt that may accumulate in a pressroom.

To Paper Salesmen

THE preceding pages cover in a general way some of the difficulties that arise through dust and dirt in the pressroom. Discussion of these things with the printers with whom you are in constant contact will undoubtedly bring to light many phases of these subjects which will be interesting and instructive.

We suggest that you talk over with them the various difficulties and preventive measures outlined and relay to us their suggestions and criticisms.

WARREN'S

Standard Printing Papers

ARE TESTED FOR QUALITIES REQUIRED
IN PRINTING, FOLDING AND BINDING



WARREN'S CAMEO—Dull Coated Book	<i>Dull Surface</i>
WARREN'S CAMEO POST CARD—Dull Coated	<i>Dull Surface</i>
WARREN'S CAMEO COVER—Dull Coated	<i>Dull Surface</i>
WARREN'S SILKOTE—Dullo-Enamel Book	<i>Semi-dull Surface</i>
WARREN'S SILKOTE POST CARD—Dullo-Enamel	<i>Semi-dull Surface</i>
WARREN'S SILKFOLD—Strong Dullo-Enamel	<i>Semi-dull Strong Coated</i>
WARRENFOLD—Strong Coated	<i>Glossy Strong Coated</i>
WARRENFOLD COATED WRITING	<i>Glossy Strong Coated</i>
WARREN'S LUSTRO—Superfine Coated Book	<i>Glossy Surface</i>
WARRENTOWN COATED BOOK	<i>Glossy Surface</i>
WARREN'S CUMBERLAND COATED BOOK	<i>Glossy Surface</i>
WARREN'S LITHO COATED	<i>Glossy Surface</i>
WARREN'S LITHO SUPER	<i>Super-calendered</i>
WARREN'S LITHO MACHINE	<i>Machine Finish</i>
WARREN'S OFFSET	<i>Offset</i>
WARREN'S PRINTONE—Semi-coated	<i>Extra Smooth Surface</i>
WARREN'S LIBRARY TEXT—Fine English Finish	<i>English Finish</i>
WARREN'S OLDE STYLE—Antique Wove (Watermarked)	<i>Eggshell Finish</i>
WARREN'S OLDE STYLE—Antique Laid (Watermarked)	<i>Laid Antique</i>
WARREN'S OLDE STYLE MIMEOGRAPH—Laid (Watermarked)	<i>Mimeograph</i>
WARREN'S CUMBERLAND SUPER BOOK	<i>Super-calendered</i>
WARREN'S CUMBERLAND MACHINE BOOK	<i>Machine Finish</i>
WARREN'S "1854" PUBLISHER'S BOOK	<i>Medium Finish</i>
WARREN'S NO. 66 BOOK—Bulking Antique	<i>Antique Finish</i>
WARREN'S THINTEXT—India Paper	<i>for Thin Editions</i>
WARREN'S THINWEAVE	<i>Carbon Copy Bond</i>
WARREN'S FINELEAF—Makeready Tissue	<i>Makeready Tissue</i>
WARREN'S BOOKLET ENVELOPE PAPER	

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July 2016

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