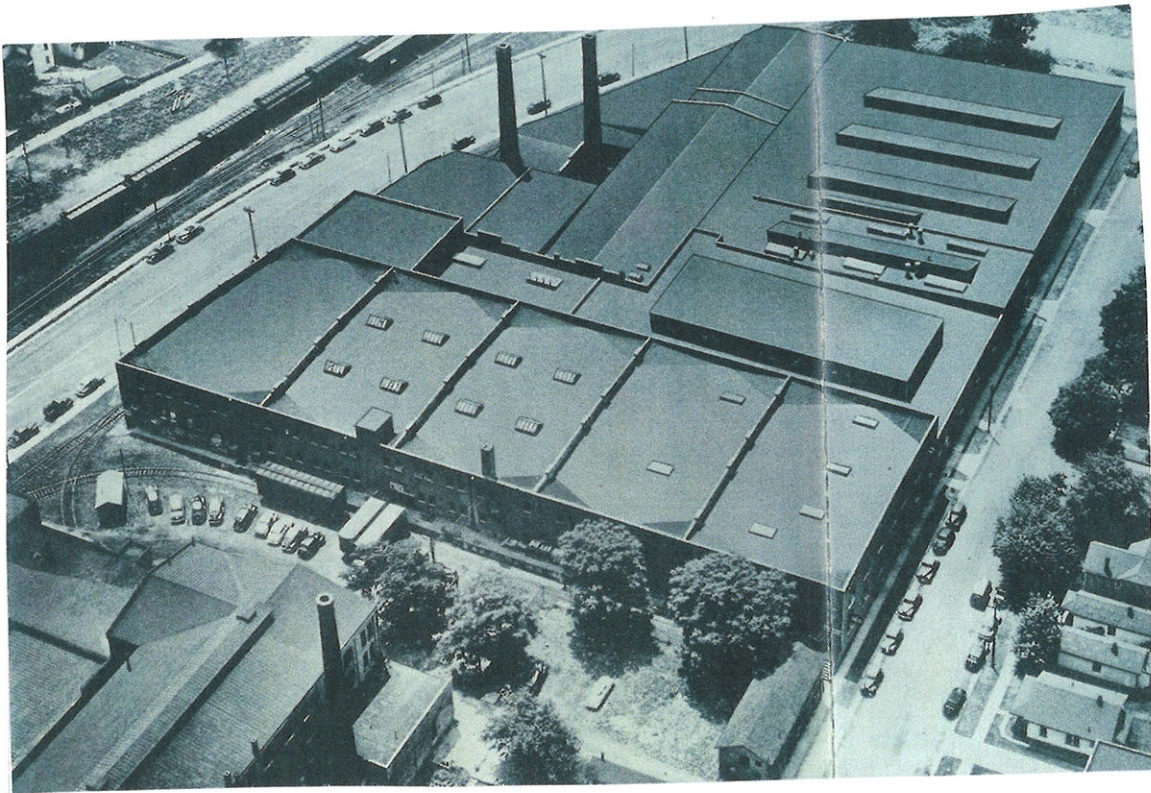


Peddlers Dressed In Paperboard;

**Samuel Bergstein & Sons;
Origins of the Packaging Industry in America**



***Interstate Folding Box Co. Headquarters on
Verity Parkway, Middletown, Ohio 1911-1981***

Copyright© 2009 David M. Bergstein

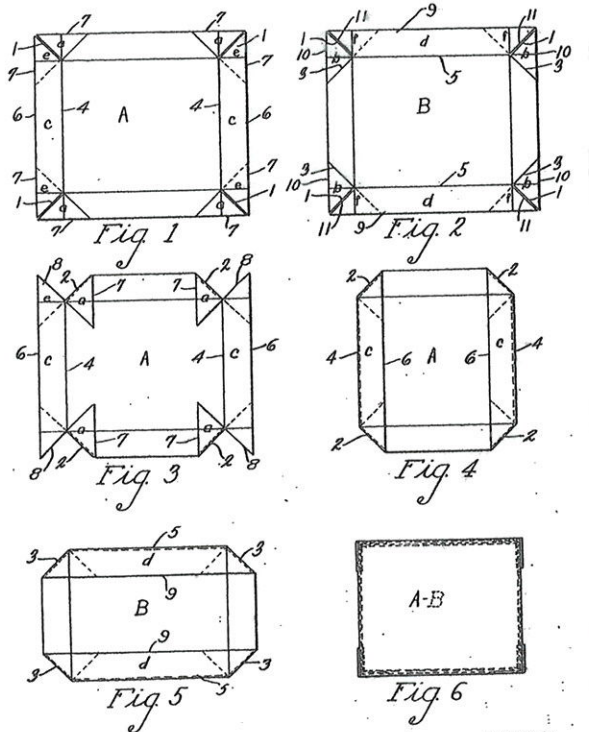


Samuel Bergstein (1882-1968)
Grandfather of today's packaging industry.
INTERSTATE FOLDING BOX CO.

March 4, 1924.

S. BERGSTEIN
 PAPER FOLDING BOX
 Filed March 23, 1922

1,485,584



INVENTOR
Samuel Bergstein
D. W. White

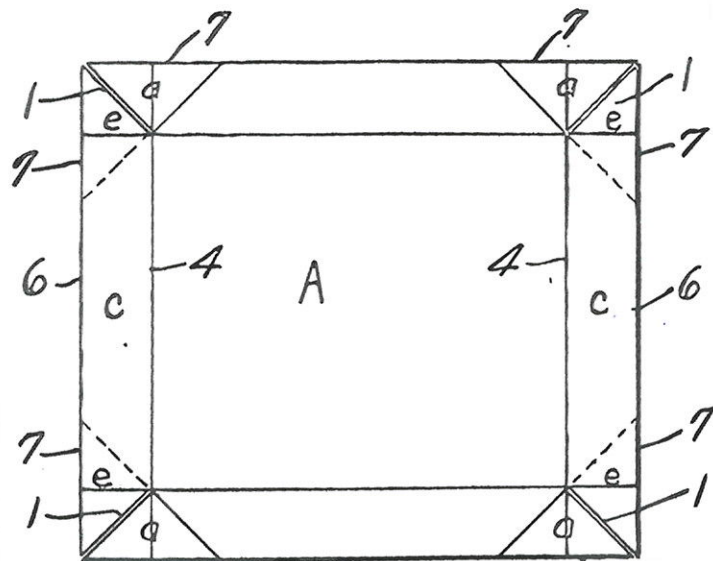
The simplex carton, trademarked as the **FOLDOMATIC**.
 He had 95 U.S. Patents; his first in 1915, a paper tray.
 Samuel built a whole industry from the ground up.

The two most common types of folding boxes; a) the simplex and b) the ubiquitous "reverse tuck" carton.

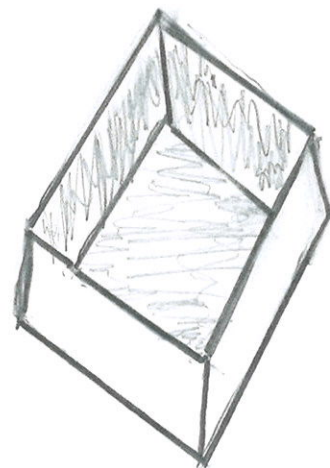
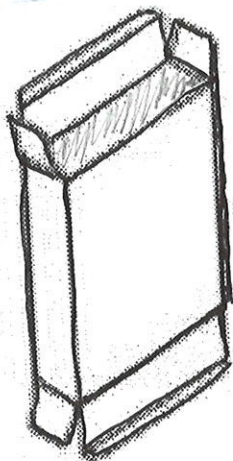
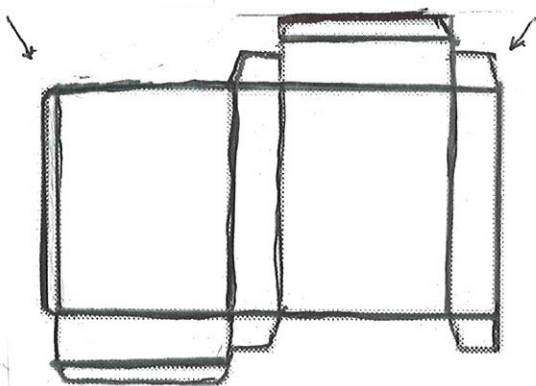
Printed sheets of paperboard are cut, perforated and creased into "blanks." The blanks are lined and/or folded and glued; the open-ended cartons are then put into cases & shipped.

The simplex a.k.a. 'Foldomatic' is a "knock-down/set-up" box. One advantage is that in their collapsed state they require less storage space. This type of paperbox is used by department stores, bakeries, etc.

a)

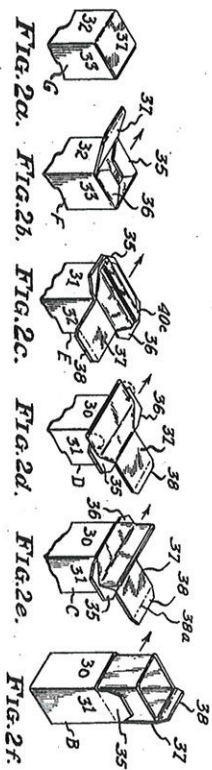
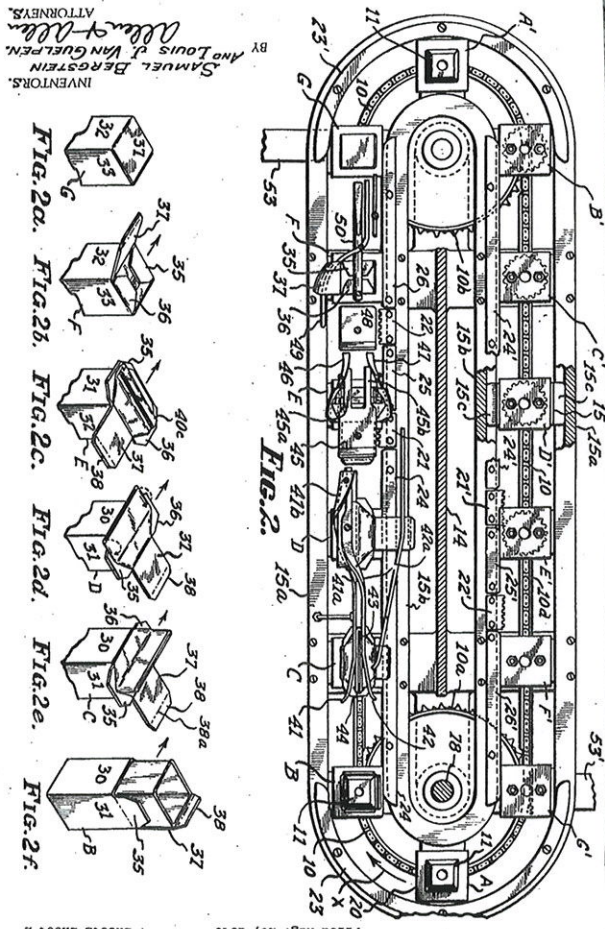
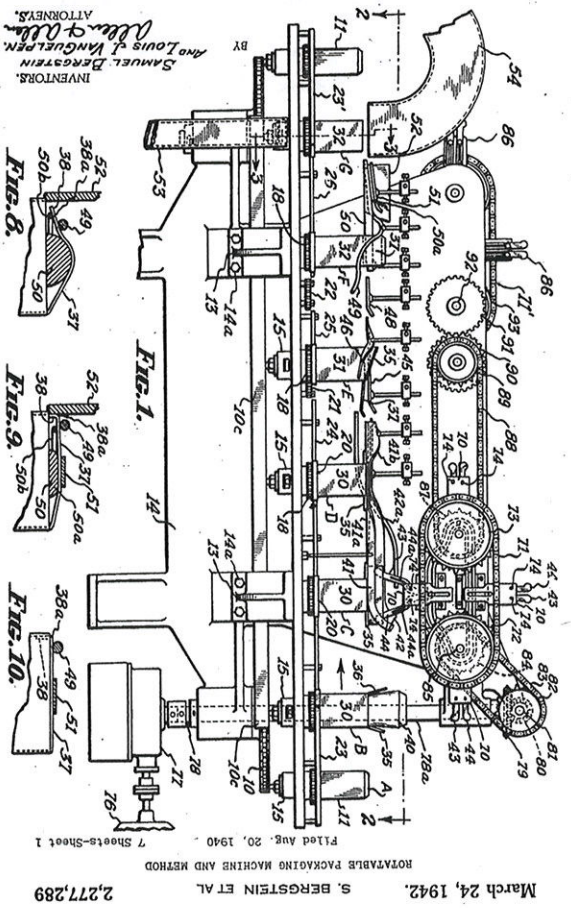
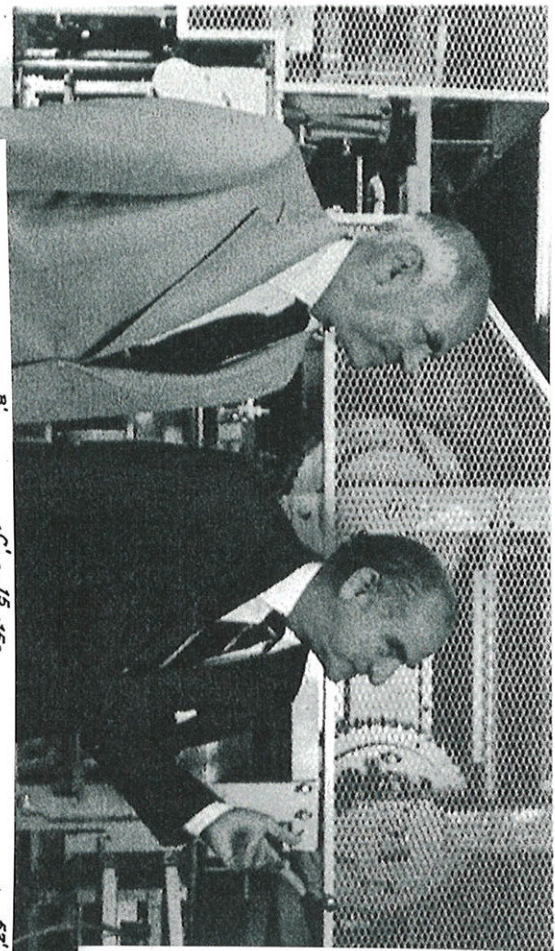


b)



The reverse tuck carton is by far the most common paperboard container in the world. This carton lends itself best to a hermetically sealed inner-liner of plastic, paper or foil (quite often a combination of all three).

Frank D. Bergstein & Robert M. Bergstein
In front of Rotoseal Machine, 1970



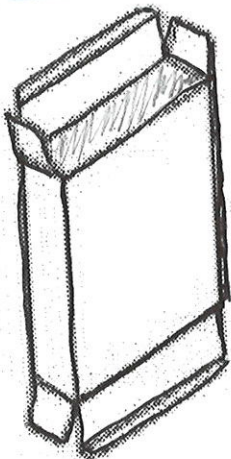
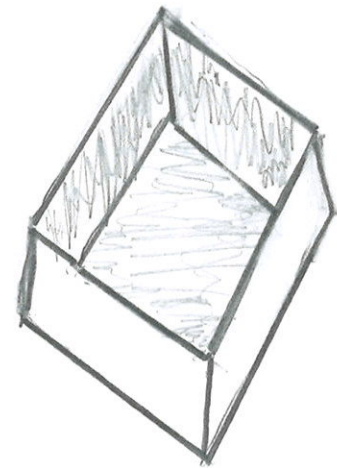
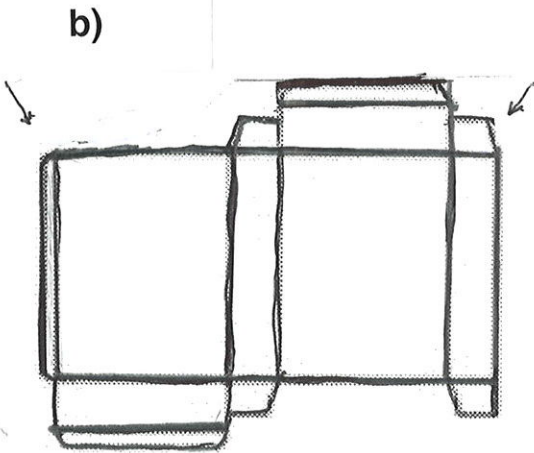
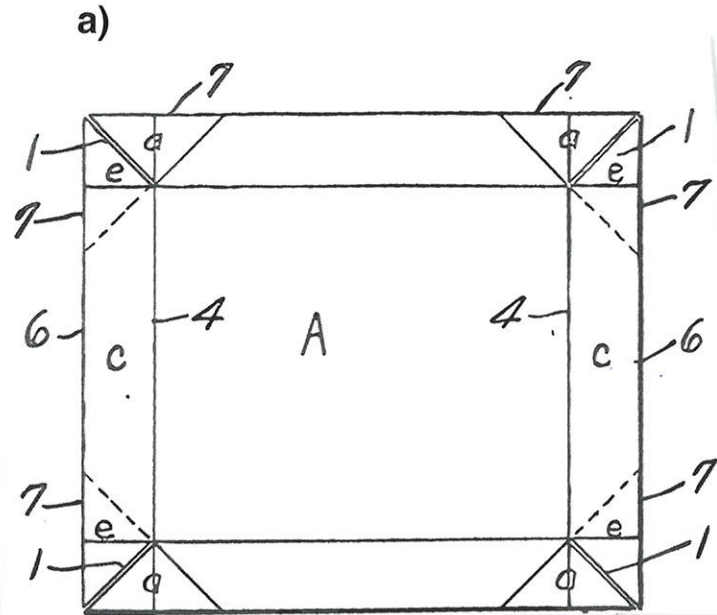
Steps for sealing filled containers, from right-to-left

Dozens of Rotoseal machines were manufactured by Interstate's own machine shop. Entire filling-sealing lines were custom installed for numerous manufacturers of food and house-hold cleaning products.

The two most common types of folding boxes; a) the simplex and b) the ubiquitous "reverse tuck" carton.

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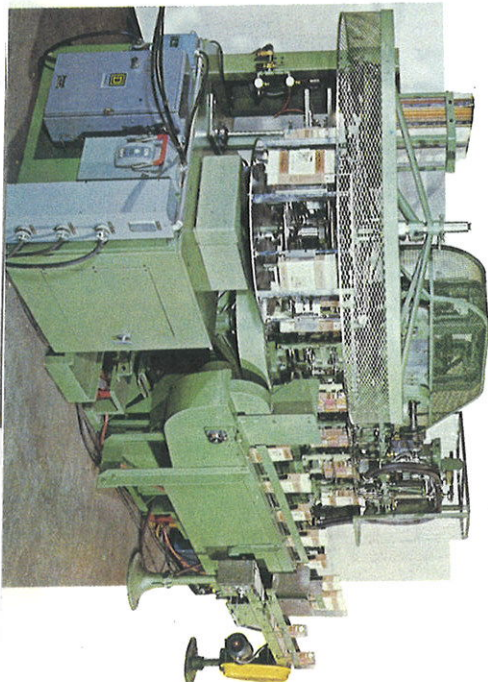
Interstate patented the first mass produced paper boxes, the lined container and the machines to help fill them (Foldomatic- RotoSeal) all by the late 1930s'.

ROTOSEAL PLUS INNER-LINED CONTAINERS



A quick look on any supermarket shelf will reveal dozens of INNER-LINED Containers.

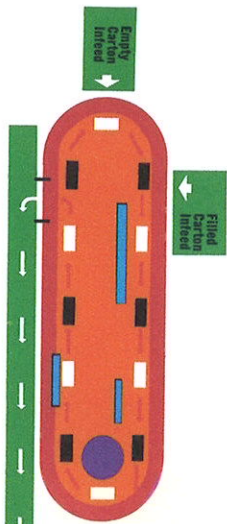
INNER-LINED Containers are lined on machines we call Comblers running at speeds up to 500 per minute. These machines are designed and built in Interstate's machine shop. The Comblers automatically form the inner liner required for the specific product, and then fold and glue the carton around the liner so that the liner and carton become a single unit. Interstate has the capacity to turn out hundreds of millions of INNER-LINED Containers per year.



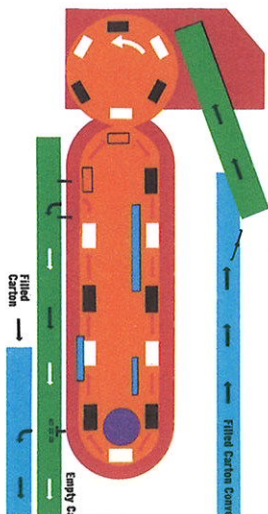
The second part of the system—ROTOSEAL

Machines—also designed and built in Interstate's machine shop, operate in customers' plants. ROTOSEAL Machines automatically feed the INNER-LINED Containers from a hopper, heat seal the liner, and glue and close the ends.

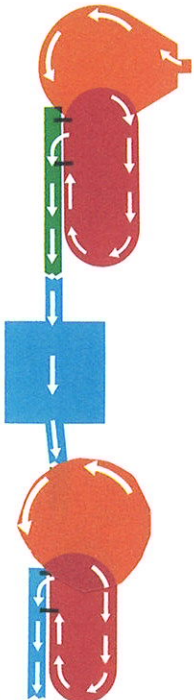
There are three basic types of ROTOSEAL Machines—the ROTOSEAL Semi-Automatic 30 which heat seals the liner, glues and closes INNER-LINED Containers at speeds up to 30 cartons a minute, the ROTOSEAL Automatic 60 which operates at speeds up to 60 cartons a minute and the Duo-Automatic 120, the high performance ROTOSEAL line which runs at speeds up to 120 cartons per minute.



ROTOSEAL SEMI-AUTOMATIC 30 heat-seals the liner, glues and closes INNER-LINED Containers at speeds up to 30 cartons per minute.

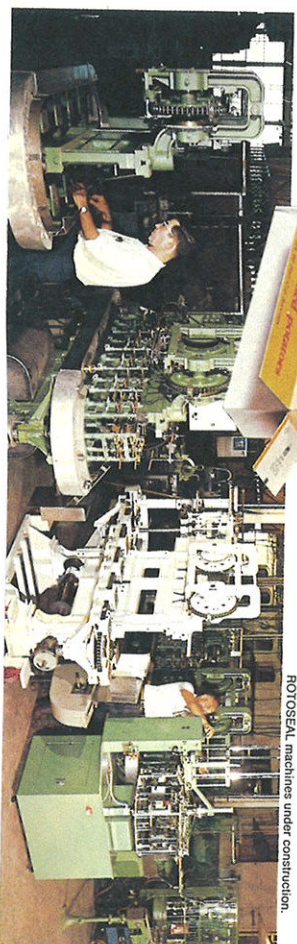


ROTOSEAL AUTOMATIC 60 erects, heat-seals the liner, glues and closes INNER-LINED Containers at speeds up to 60 cartons per minute.



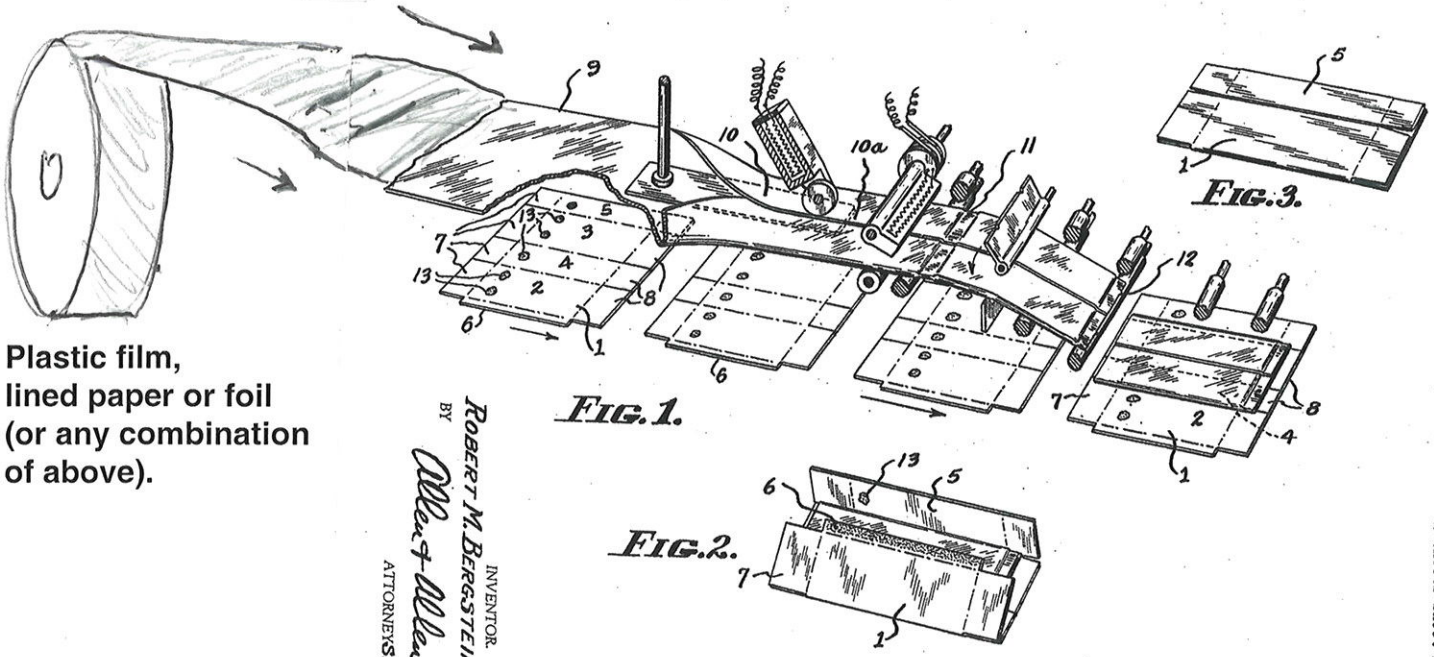
ROTOSEAL DUO-AUTOMATIC 120 erects, heat-seals the liner, glues and closes INNER-LINED Containers at speeds up to 120 cartons per minute.

INNER-LINED
CONTAINER



ROTOSEAL machines under construction.

The "Combiner." Named so because it combined the bag with the box.



Plastic film,
lined paper or foil
(or any combination
of above).

BY
Allen + Allen
ATTORNEYS.
ROBERT M. BERGSTEIN
INVENTOR

Nov. 16, 1937.

R. M. BERGSTEIN

CONTAINER

Filed Oct. 4, 1935

2 Sheets-Sheet 1

2,099,257

It essentially was a conventional straight line gluer synchronized with a simple bag machine. The bag is formed, sealed along its main seam, chopped to length and glued fast to the carton.

Nov. 16, 1937.

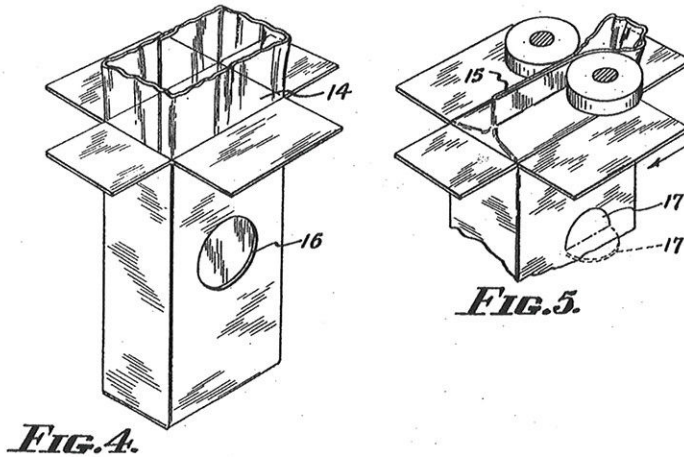
R. M. BERGSTEIN

2,099,257

CONTAINER

Filed Oct. 4, 1935

2 Sheets-Sheet 2



The container is ready for filling and sealing. Interstate also developed the orbital heat sealer.



Reliable Product Storage
Built in Advertising



A small assortment of an extremely wide range of sealed containers and packages, Produced 1950-1980. Interstate manufactured many Rotoseals, also installing complete packaging lines for many famous companies

INTERSTATE FOLDING BOX CO.

1911-1981

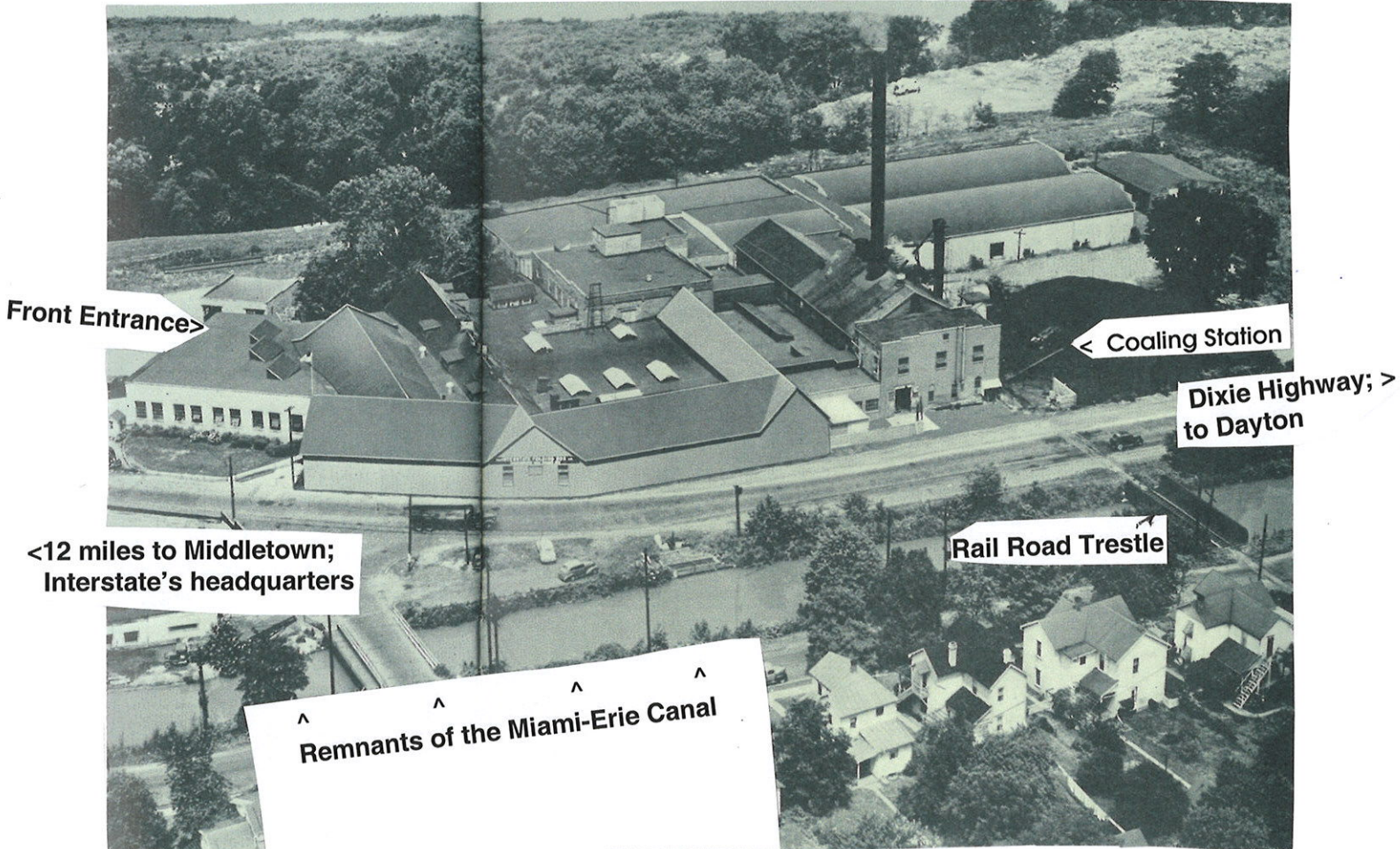


Miamisburg Boxboard Mill

Miamisburg, Ohio, circa 1950

North >

Great Miami River



This bucolic scene shows the riparian aspects of a classic paperboard mill when it was purchased by Samuel's two sons. This was a 120 ton per day mill that was capable of hydro-power when the river ran high in certain seasons. In 1950 the Miami Valley of Southern Ohio was a scenic, rural area with live trout streams. A large, deep underground river runs under the width of the valley from the Great Lakes to the Ohio River, a remainder of glacial recession. The accessibility of both surface and ground water gave it the nickname "Mill Valley."

GLOSSCOAT

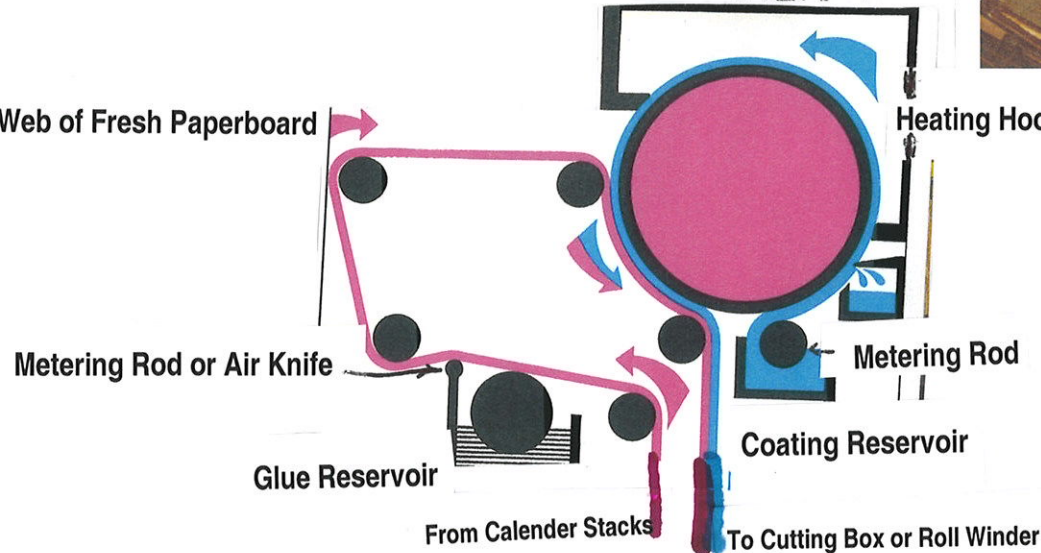
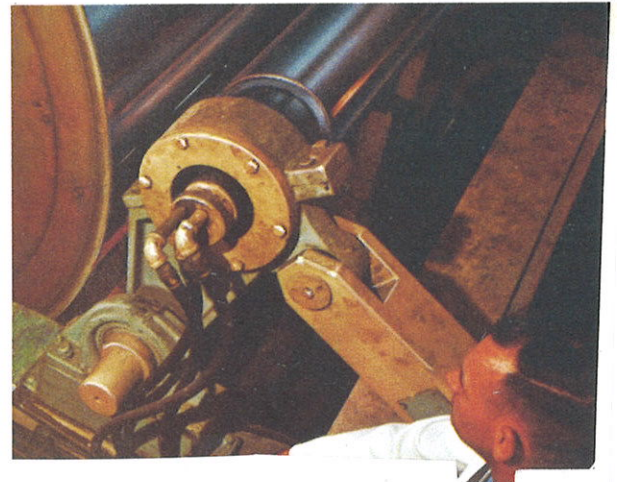
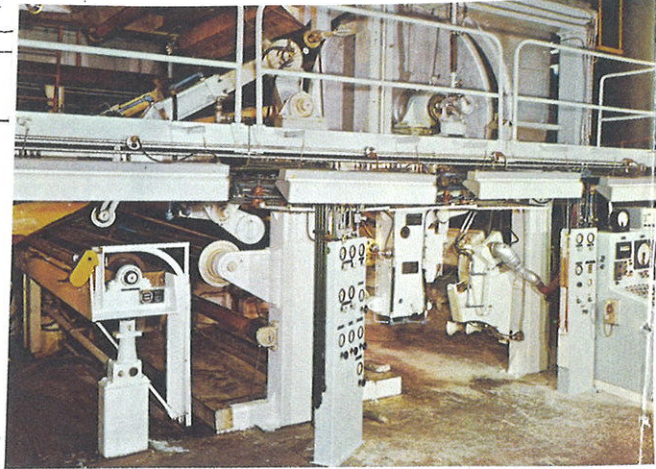
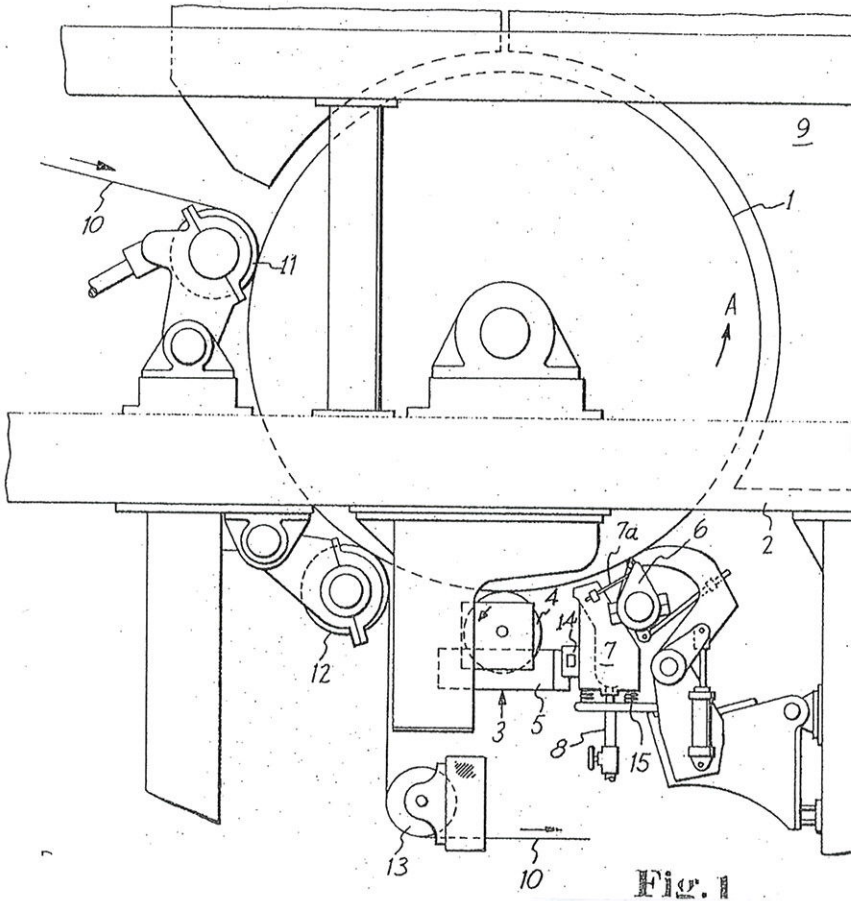
The world's first 'on machine' cast coating process.

March 14, 1967

F. D. BERGSTEIN ET AL 3,309,438
METHOD AND MEANS FOR CONTROLLING THE CONSISTENCY OF CASTING
COMPOSITIONS DURING CASTING

Filed Feb. 14, 1966

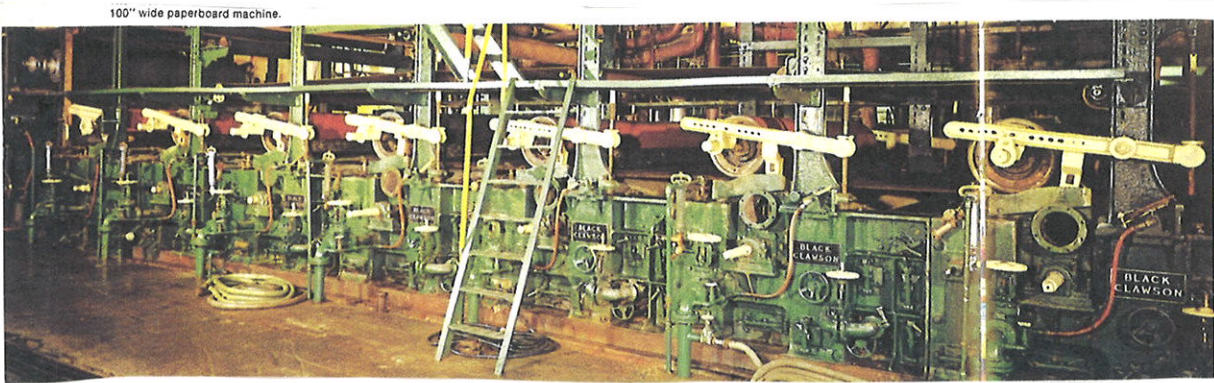
2 Sheets-Sheet 1



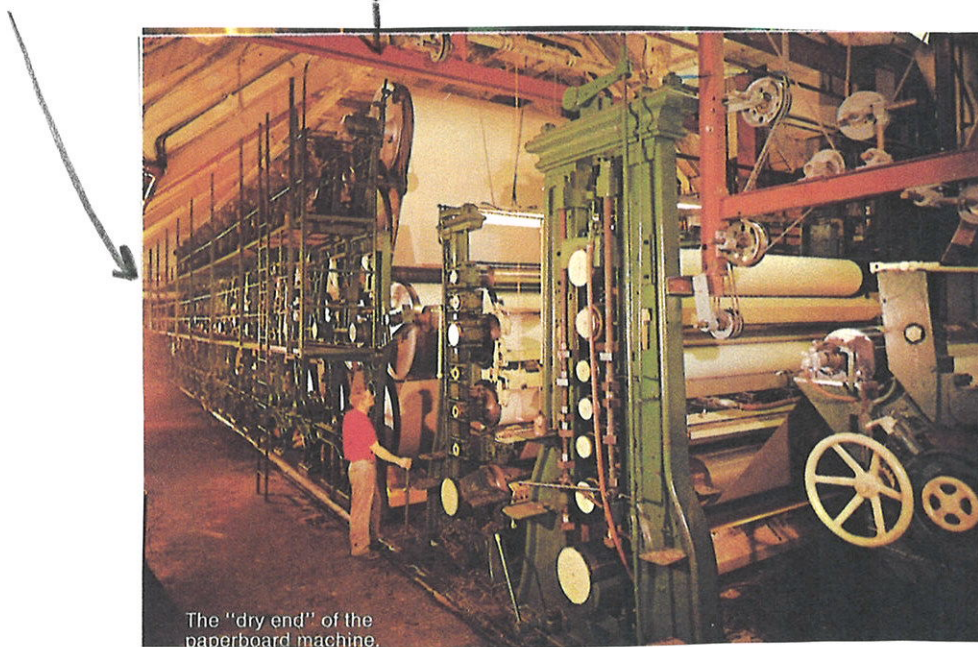
coating onto the drum.

"On Machine" denotes GLOSSCOAT was applied to the finished web of fresh paperboard right before the cutting box. The mirror-finish chrome steel drum was eight feet wide, weighed 15 tons and was round within .001 inch tolerance. The coater was in a 100' high tower above the delivery end of the paperboard machine.

The “wet end” or where the paperboard is built-up by layers and transferred onto a continuous web of synthetic fiber called a “felt.”

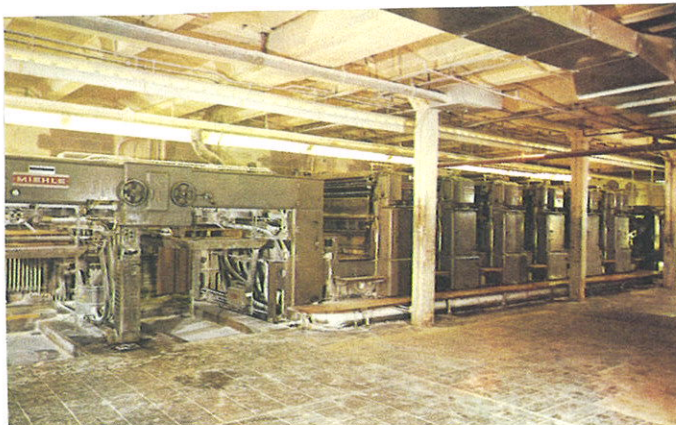


The web of paperboard passes over a multitude of dryers and chill rollers.



The calender stacks impress the final finish to the paperboard. Starch, wax and plastic powders are added for “sizing” the outer layers.

Sizing assists in water repellence and grease resistance. In turn these characteristics aid in offset lithographic printing, creasing and gluing.

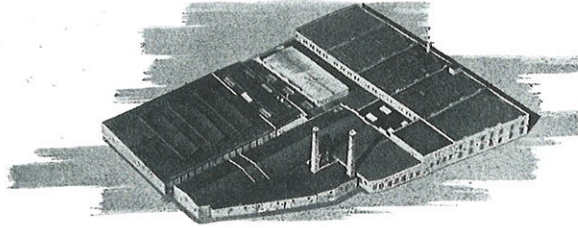


Six-color 52" x 76" sheet-fed rotary letterpress delivers up to 5,000 sheets per hour.

The largest sheet fed letterpress in the World, nicknamed “Big’Mo,” so inscribed on the press by the manufacturer, MIEHLE (1962).

INTERSTATE FOLDING BOX. CO.

One Page Flyer from World War II



Priorities or Preference?

When emergency demands arise, it is a mark of the ability of the business to survive, as well as a patriotic duty, for it to adapt its abilities and facilities as closely as possible to the needs of National Defense.

Among Interstate's developments which are finding increasingly wider use in a variety of defense packaging needs, are the following—

CARTRIDGE CONTAINERS—Automatic pre-fabricated partition type containers for calibre .30, calibre .45 and calibre .50.

BANDOLEER POCKETS—For loaded Springfield and Garand clips.

GARAND CLIP BOXES—Special greaseproof treated automatic boxes for bulk packing Garand clips.

SHELL CASES—Heavy weight protective containers for smaller size shells including 20 M/M.

MOISTUREPROOF BAGS—Special synthetic resin laminated, heat-sealable, bags for metal products like piston rings, requiring the ultimate in surface protection.

FOOD CONTAINERS—Pre-lined containers shipped in flat form, having unique built-in characteristics of moisture and grease protection for the packaging of dehydrated foods, shortening and other essentials.

SPECIAL MACHINERY—Automatic equipment of special design for sorting and loading cartridges, for heat-sealing and closing food containers, etc.

In normal times, a business must progress by what might be termed "priority by preference"; that is, the voluntary preference of its customers for its products.

Among the many specialized packages which Interstate in its 30-year history has been well and steadily supplying to many of the nation's large users, in many fields, are the following—

FOLDOMATIC BOXES—Knocked down, full automatic boxes in display or telescope style, in sizes ranging from a pound of candy to a pair of blankets.

SUPER-CELL EGG CARTONS—Two-in-one, divided type, moulded pulp cushioned egg cartons.

TRANSTATE BAGS—A complete specialty bag service, plain or printed, regular or moisture proof, transparent or combination-cellophane bags in sizes up to 26" x 18".

STERILINED LARD & SHORTENING CONTAINERS—Knocked down, greaseproof lined, cap-type, lid containers, for an endless variety of food products, either wet or dry packed. For semi-automatic handling, or adapted to full mechanization with the ROTOSEAL machine.

LAMINATED BOARD & CONTAINERS—Economical production of foil or decorative boards, in addition to protective wax and moistureproof laminations.

COATED SPECIALTIES—Greaseproof coated VAPETEX Board for bakery products, etc., thermoplastic resin-coated wrappings and bags.



THE
INTERSTATE
FOLDING BOX CO.
MIDDLETOWN, OHIO

Full information on any of our products, for present or future use, gladly supplied upon request

This advertises packaging for food, spare parts and ammunition. The weapons mentioned—the M1 and 20 MM—would place this ad about at 1943-1944.

October 19, 1956

The Patent Trademark and Copyright Foundation
Of The George Washington University
Washington 6, D. C.

Attention: Mr. L. James Harris, Associate Director

Dear Sir:

It is difficult for me to conform with the questionnaire to give you the information about my patent experience. The Patent Office granted me 118 patents, all covering different phases of paperboxes or packages. Enclosed I am sending you a list of all the patents granted me.

In 1895, when I was 13 years old, I arrived in this country from Hungary with my parents. I had very little schooling and was barely able to read and write in the German language. Upon my arrival here I immediately went to work at a 60 hour week receiving \$3.00 a week wages.

I was most anxious to learn the English language so I entered night school which would make this possible. Upon my entrance at night school I saw that the men there were little interested in learning, so I gave up the idea of trying to learn English in school. Instead I bought a German-English pocket dictionary and in my spare moments I studied this. I also went to the Cooper Union and listened to the lectures there in order to learn how to pronounce English. This went on for about three years, and I was still working 60 hours a week for \$3.00.

Then one day I was offered a position in a bank for \$5.00 a week, and I worked there for almost 7 years with my wages being raised year after year.

After this position I was offered work with a steam ship company at \$25.00 a week. My job was to take care of immigrants who arrived on American steam ships and see that they were taken to Ellis Island for government inspection. My duties were to look after the interests of those immigrants who were detained by the immigration officials for one reason or another. These immigrants who were detained at Ellis Island were cared for by contractors appointed by the Commissioner of Immigration, who in turn charged the steam ship company. This gave me good experience in fair dealing.

When President McKinley was elected he appointed a new Commissioner of Immigration, and the Commissioner appointed two men to whom contracts were given to for caring for those immigrants detained on Ellis Island. These contractors also maintained a restaurant where many immigration officials and steam ship agents ate their meals.

I became suspicious that something was wrong when the restaurant refused payment for meals from steam ship agents. When they refused payment from me I did not want to accept free meals and insisted that payment be accepted. None of the other steam ship agents raised any objection to this. Eventually I gathered evidence that the contractors were overcharging the steam ship company and that they were not caring for as many immigrants as they made the steam ship company pay for. I reported this to my company and gave them evidence that my statements were correct and that overcharging took place.

Shortly after I made that report the company introduced a young man to me in order that he might learn how to take care of detained immigrants. This young man happened to be a secret service man sent by President Theodore Roosevelt shortly after his inauguration due to the assassination of President McKinley. This resulted in both the Commissioner of Immigration and the two contractors he appointed being ousted and a new Commissioner appointed. This new Commissioner appointed a new contractor, and all these changes were due to truthful reports I made on what was being done at Ellis Island.

After I married I left the steam ship company and tried to find work that offered greater opportunity. I went to Birmingham, Alabama with my wife and child and advertised in the daily paper that I wanted to buy some interest in a manufacturing business. A paperbox concern answered the ad and I did buy an interest in it and retained this for some months, although I did not get along well with the owner. He claimed that I was too inquisitive to know things, so I left that company. Up to this time I had learned very little about paperboxes. No one there seemed to be very interested in anything but the routine work. While there I learned where this company was buying its paperbox products. These were bought in Middletown, Ohio. So I left Birmingham with my family for Middletown and there I opened up a very small box factory. This was about 1911.

Mr. L. James Harris, Associate Director

-3-

In the enclosed list of patents you will find that the first patent granted to me was in 1915. Among those patents there are some listed that have to do with bags. I made a bag machine to produce cellophane-type bags. That machine was so much more effective than the machine the bag manufacturers were using that they were unable to compete with the cost of the bags my machine produced. I could cite you other instances, but this will be enough. Without having had much education or training, you find in the list the results produced by a person who is eager to use his mind effectively.

Yours very truly,

SB:REG
enc.

The 95 U.S. Patents of Samuel Bergstein. Between his sons and other employees, Interstate had 186 U.S. Patents.

SAMUEL BERGSTEIN

Re17975 PAPER TRAYS
 0960064 PORTABLE HEATER
 1405584 PAPER FOLDING BOXINTERSTATE FOLDING BOX
 1485585 PAPER FOLDING BOX
 1563323 PAPER BOX MAKING MACHINE
 1599983 PAPER BOX & THE LIKEINTERSTATE FOLDING BOX C
 1644411 PAPER BOX & THE LIKE
 1647072 ADHESIVE APPLYING MECHANISM
 1693172 MAKING & SEALING BOXES
 1714542 PAPER BOX OR THE LIKE
 1804738 MAKING PAPER CONTAINERS PAPER BOX
 1808014 MACHINE FOR MAKING PAPER BOXES
 1833557 MAKING PAPER CONTAINERS
 1864632 MACHINE FOR MAKING PAPER BOXES
 1847998 JOINING MATERIALS TOGETHER
 1868871 MACHINE & PROCESS FOR MAKING PAPER BOXES
 1868872 PAPER BOX MAKING MACHINEFRANK DAVID BERGSTEIN TR
 1868873 MACHINE FOR OPENING CARTONS
 1923363 TREATING MOISTURE PROOF SHEETS
 1926364 METHOD OF MAKING KNOCKDOWN BOXES
 1926365 KNOCKDOWN PAPER CONTAINER
 1926366 KNOCKDOWN CONTAINER
 1956820 MEANS FOR MAKING PAPER BOXES
 1960804 MACHINE FOR ASSEMBLING CARTONS
 1962759 MACHINE & METHOD FOR MAKING KNOCKDOWN BOXES
 1974256 METHOD OF SEALING PACKAGES
 1974408 MAKING KNOCKDOWN BOXES

PAGE TWO

SAMUEL BERGSTEIN

1980179 SEALING PACKAGES
 1980180 SEALING PACKAGES HERMETICALLY SEALED CARTON
 1987224 REMOVING SCRAP, FOLDING & GLUING A CARTON
 1987225 LAMINATED PAPER BOARD CONTAINER
 1998800 CARTON FOR FRAGILE ARTICLES
 2008167 MOISTURE PROOF PACKAGE
 2008168 CARTON & CONTAINER WRAPPING
 2033222 EGG CARTON
 2033223 METHOD OF MAKING FLAT TUBULAR BODIES WITH FLAPS
 2047160 CARTON
 2074357 METHOD OF MANUFACTURING A CARTON
 2074886 MACHINE & METHOD FOR MAKING TUBULAR CONTAINERS
 2097428 METHOD FOR SEALING PACKAGES HERMETICALLY
 2100022 CONTAINER ASSEMBLING MACHINE
 2110443 BOX WITH LID ATTACHED
 2125042 EGG CONTAINER
 2125146 DEVICE FOR OPENING, DISCHARGING CONTENTS & MUTILATING BOXES
 2125147 METHOD OF MAKING KNOCKDOWN BOXES
 2125510 APPARATUS FOR MAKING SEALED PACKAGES
 2128893 HERMETICALLY SEALED PACKAGE
 2130786 CONTAINER GLUEING MACHINE
 2145083 CONTAINER
 2145334 METHOD & MEANS FOR SEALING PAPERBOARD BLANKS
 2145682 METHOD FOR REINFORCING ONE PIECE BOXES
 2149111 MACHINE FOR MAKING KNOCKDOWN BOXES
 2154084 EXTENSION EDGE BOX

PAGE THREE

SAMUEL BERGSTEIN

2198855 METHOD OF MAKING INFOLDED KNOCKDOWN BOXES
 2200238 METHOD OF MAKING KNOCKDOWN BOXES
 2311148 METHOD OF FORMING EGG CARTONS
 2217503 INTERLOCKING BOX
 2217504 METHOD OF MAKING KNOCKDOWN BOXES
 2228943 EGG CARTON ASSEMBLING MACHINE
 2244282 MAKING LIQUID TIGHT CONTAINERS
 2256888 MEANS & METHOD FOR GLUING WATER PROOF BLANKS
 2277289 ROTATABLE PACKAGING MACHINE
 2307913 END CLOSURE FOR TUBULAR BODY
 2326186 AUTOMATIC BOX
 2330466 METHOD & MEANS FOR PACKAGE CLOSURE
 2408504 MEANS FOR COATING WEBS
 2412031 CARTON FOR SEALING BY IMERSION
 2412862 METHOD & MEANS FOR HERMETIC BAG AND TUBE CLOSURE
 2430755 MAKING COLLAPSIBLE BOXES
 2442161 MAKING GAS FILLED FLEXIBLE CONTAINERS
 2443221 MAKING GREASE & MOISTURE PROOF CONTAINERS
 2443222 PROCESS OF MAKING PAPER
 2443293 MEANS FOR MAINTAINING & CONVEYING CARTONS
 2472883 METHOD & APPARATUS FOR PRODUCING CARTONS
 2474391 PRODUCING PACKAGING STRUCTURE
 2500338 MANUFACTURING OF TRANSPARENT KNOCKDOWN CONTAINERS
 2506056 MAKING GAS TIGHT & GAS FILLED PACKAGE

PAGE FOUR

SAMUEL BERGSTEIN

2506057 RENDERING PAPERBOARD GAS TIGHT
 2506769 FILLING & SEALING CONTAINERS WITH INERT GAS
 2519102 METHOD & APPARATUS FOR SEALING CONTAINERS
 2515327 METHOD OF MAKING KNOCKDOWN HINGED CARTON LID
 2536529 METHOD OF PRODUCING BAGS WITH OPENING MEANS
 2536530 OVERLAP END BOX
 2536675 MAKING BAGS
 2545802 HINGED LID AUTOMATIC BOX
 2548251 SECURING THE EFFECTS OF END DIPPING IN GAS TIGHT FLEXIBLE WALL PACKAGE
 2548252 BOX WITH ATTACHED HANDLE
 2554004 MECHANISM & METHOD FOR MAKING BOXES WITH ATTACHED HANDLES
 2571408 EGG CONTAINER
 2615378 ASSEMBLING MULTI PART EGG CONTAINERS
 2630626 WATER & GAS TIGHT SHIPPING CONTAINER
 2632918 END COATING OF PACKAGE
 2634564 MACHINE FOR SEALING ENDS OF WRAPPED ARTICLE
 2697546 CONTAINER INCORPORATING NON FIBROUS FILMS
 2941111 MACHINE FOR MAKING KNOCKDOWN BOXES



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Logout Please logout when you are done to release system resources allocated for you.

Record 1 out of 1

Check Status (TARR contains current status, correspondence address and attorney of record for the mark. Use the "Back" button of the Internet Browser to return to TESS)

Typed Drawing

Word Mark **FOLDOMATIC**
 Goods and Services (EXPIRED) IC 016. US 002. G & S: PAPERBOARD CARTONS. FIRST USE 19310114. FIRST USE IN COMMERCE: 19310114
 Mark Drawing Code (1) TYPED DRAWING
 Serial Number 72220513
 Filing Date June 7, 1965
 Registration Number 0816439
 Registration Date October 11, 1966
 Owner (REGISTRANT) INTERSTATE FOLDING BOX COMPANY, THE CORPORATION OHIO 300 S. VERITY PARKWAY MIDDLETOWN, OHIO
 Type of Mark TRADEMARK
 Register PRINCIPAL
 Affidavit Text SECT 15.
 Live/Dead Indicator DEAD

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Typed Drawing

Word Mark **ROTOSEAL**
 Goods and Services (EXPIRED) IC 007. US 023. G & S: MACHINERY FOR CLOSING AND SEALING PAPERBOARD CARTONS. FIRST USE: 19400000. FIRST USE IN COMMERCE: 19400000
 Mark Drawing Code (1) TYPED DRAWING
 Serial Number 72220512
 Filing Date June 7, 1965
 Registration Number 0814935
 Registration Date September 13, 1966
 Owner (REGISTRANT) INTERSTATE FOLDING BOX COMPANY, THE CORPORATION OHIO 300 S. VERITY PARKWAY MIDDLETOWN, OHIO
 Type of Mark TRADEMARK
 Register PRINCIPAL
 Affidavit Text SECT 15.
 Live/Dead Indicator DEAD

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