## Synthetic Bombing Aid to Uncle Sam's Bombardiers

Something new has been added to the training of Uncle Sam's bombardiers. It is "synthetic bombing," which is the technical term for use of models and gadgets to simulate, on the ground, the procedures of actual bombing. At the world's largest bombardier school, Midland, Texas, synthetic bombing has been developed to a point where everything but the explosions of real bombing can be duplicated in classrooms

and huge training hangars. Synthetic bombing is planned to enable students to gain experience in use of the secret U.S. bombsight before they actually go aloft on practice missions over the vast nearby target ranges. It is used to teach them in graphic detail, the principles of bombloading, bomb trajectory and precision bombing.

Right: Using a classroom model of a plane's bomb bay, cadet bombardiers learn how a

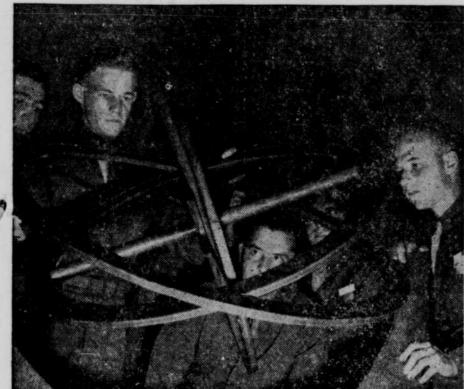


Synthetic trainer. Miniature plane slides along track at top, releasing toy bombs along wire tangents.



This is Uncle Sam's bombsight, 1918 model. Sighting through it, a cadet bombardier at the AAF bombardier school of the secret U. S. bombsight learns basic principles.

Bombing trainer shown under guard. This device enables bombardiers to gain practice in use without leaving the ground.



Bombsight class. Learning the principles of the secret U.S. bombsight, cadet bombardiers at the Midland AAF bombardier school study the principles of a gyroscope. Oversize model shown above is one of the "gadgets" used in synthetic bombing.

In closely guarded classrooms, student bombardiers see in operation enlarged models of parts of the famous American bombsight. Studying these models, they rapidly learn both operational and maintenance problems connected with their deadly instrument.

Synthetic bombing, developed almost from scratch during the past year at the Midland bombardier school, is principally the work of a group of ex-university science professors who make up the ground school faculty of the West Texas bombardier college. According to the director of training, synthetic bombing has greatly speeded up the preliminary phases of bombardier training.

# PATTERNS SEWING CIRCLE



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Barbara Bell Pattern No. 1748-B, designed for sizes 32, 34, 36, 38, 40, 42, 44

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Balance With Our Ears

The transportation restrictions

ave sent many thousands of peo

ple back to the bicycle. Some of

years, but the art of balancing on

two wheels came back to us easily

Now, why don't we fall over?

The tires on the bicycle are a

semi-circular pattern, you will

have noticed, and when you come

to think about it they do look pretty

precarious. In fact, it is obvious

that you are going to hold them

"Nonsense!" exclaimed Elmer

Twitchell today. "For the past

year I have lived largely on

cinema meals. Hungry and weak, I have gone to a movie

and found my appetite appeased

"There was one spell when I had

lost ten pounds. I went to a Cecille

up, not they hold you.

in no time.

the first reel!

good as before.

in the refrigerator.

putting in fruit filling.

CAN TURN OUT SUCH

PERFECT COFFEE CAKE.

AND SO QUICKLY!

In Riding a Bicycle, We

IKE looking neat, pretty and

efficient? Just button into this

A REAL indispensable — beautifully fitting shirtwaist with kick pleat and action back.

32, 34, 36, 38, 40 and 42. Size 14 (32) re quires, with short sleeves, 31/2 yards 39-

Due to an unusually large demand and current war conditions, slightly more time is required in filling orders for a few of the most popular pattern numbers. Send your order to:

SEWING CIRCLE PATTERN DEPT. Room 1958 Enclose 20 cents in coins for each Pattern No..... Size..... Name ..... Address .....

# Smile Awhile

His Prerogative

The conversation had turned on the ways of wives.

"Well," said Brown, "when my wife and I have an argument I always have the last word." "Oh," exclaimed someone. "You

Brown nodded. "Yes. I apologize."

"A monologue," wrote the school boy, "is a conversation between two people, such as husband and wife,"

Should Know Them There was a scream of brakes as the bus pulled to a sudden stop, to avoid a flustered-looking pedestrian who was

dithering in the roadway. Crimson with strain and rage, the driver leaned out of his cab. It was plain he was controlling himself with a great effort as he asked politely:
"May I ask what are your plans, sir?"

Only He Knows

Mistress-Marie, you were entertaining a man in the kitchen last night, weren't you? Marie-That's for him to say, ma'am. But I tried my best.

Trouble seems to be a patriotic affliction. It makes the eyes red, the hair white and the feelings

Some Reputation Magistrate-Is the prisoner a

known thief? Constable-A known thief? Why. he'd steal the harness of a night-

#### Peaceful Andorra

Unharmed and unmolested by the conquering Napoleon and more recently by Hitler's armies is a between France and Spain on the dependent? slopes of the Pyrenees mountains. During the long winter months the people of Andorra (pop. 5,000) are 'holed in' as the mountain passes become obstructed by snow.

Frequently farm animals are kept inside the homes to utilize the warmth of their bodies. Murder has never been committed in Andorra, according to records.



YOUR tape measure and a little figuring can help you save material when making those new slip covers. In estimating goods remember that the length and width of each section must be the same as the widest and longest measurement of the part of DeMille picture and put on fifteen in the chair to which it is to be fitted plus seams, seat tuck-in and flounce fullness.

"With new ration rules coming Slip cover material usually every day and with the people havcomes in 36 and 50-inch widths. ing troubles galore getting food, the Frequently a narrow chair back one source of relief has been those may be covered by splitting a 50-Hollywood feasts. Even a breakfast inch width of goods. For other as shown by most directors was enough to make you unbutton your chairs 36-inch material might be

To restore jam or jelly after it | If ivory enamel is to be used on

has become hard and sugary, furniture an undercoat of flat ivory

place in a warm oven and leave paint first should be put on. Im-

Wilted vegetables may be made | Sprinkle a cake with cornstarch

MY NEW RECIPE

FOR COFFEE

EXTRA

FAST. AND DID

YOU KNOW IT HAS

and allowed to stand several hours | ning off.

YOU'LL MAKE TOM PROUD TONIGHT, THAT'S BECAUSE

DEAR. NOT EVERY ENGAGED GIRL

coat is added first.

does not hold good.

GO ON, TELL TOM IT'S EASY! JUST USE FLEISCHMANN'S

EXTRA VITAMINS ONLY YEAST WITH VITAMINS A

SMART GAL, MY BRIDE-

IN BAKING! AND DAS WELL AS THE VITAMI

YOUR SECRET OF YELLOW LABEL YEAST. THAT'S THE

cut to better advantage. If the material has a large figure an extra yard will be needed for matching and centering the design. Decide in advance which seams are to be accented with welting or trimming and measure them.

NOTE-Do the springs in your chairs need fixing? Mrs. Spears' new BOOK 9 gives illustrated directions for doing this This book also contains more than 30 other thrift ideas for keeping your home attractive in wartime. Copies of BOOK 9 are available at 15 cents each. Address:

MRS. RUTH WYETH SPEARS Drawer 10 Enclose 15 cents for Book No. 9.

Address .....

### Just a Natural Curiosity To Know One's Position

The manager of Super-Colossal Pictures entered the office.

"Get out!" he howled at a young man sitting there. "While I'm boss I'll not tolerate any loafing around

"I beg your pardon," said the young man, "but I don't work here. I just came in looking for a position."

'Then you're engaged," growled the manager, "and now you're fired! Get out!"

The young man, surprised, picked up his hat and turned to the manager. "Do you mind telling me," he asked, "just what sort there until the sugar softens. This perfections in the application of of a job I had before you fired will make the jam or jelly as enamel will show less if a flat me?"

### Army Dogs to Rescue

crisp if covered with cold water before icing to prevent icing run-U. S. army dogs are specially trained in rescue work. Upon locating a wounded man, the dog re-When hanging pictures rememturns to headquarters, indicates To prevent the lower crust of ber that the center of the picture his find by chewing his "brinsell," fruit pies becoming soggy, brush should be on the level with eyes. a short wooden stick that hangs over with the white of egg before If you are unusually tall, this rule from his collar, and leads stretcher-bearers to the spot.

YES, INDEED. AND ALL

THOSE VITAMINS GO

RIGHT INTO THE BAK-

ING WITH NO GREAT

LOSS IN THE OVEN

Said Mr. Henpeck, who had just overheard his wife scolding the maid: "You and I seem to be in the same unfortunate position, Mary."

"Not likely!" replied the maid. "I'm giving her a week's notice tomorrow."

Seizing Opportunity Man at Door-Do you believe in free

Housewife-Why, certainly I do. Man-Fine. Let me use your tele-

#### Not Kidding

"See that bevy of quail in the underbrush?"

"Well, watch me shoot a hole clear through the red barn behind

ASK ME

A General Quiz

The Questions

1. Exclusive of the armed forces, how many people are now on the federal payroll?

2. What was the real name of Billy the Kid? 3. What is the approximate area

of Alaska? 4. What is the position of the Tropic of Cancer in relation to the

5. An Andalusian is a native of what country? 6. Who is the patron saint of the huntsman?

equator?

7. Who introduced the resolutions on June 7, 1776, that the small nation, Andorra, which lies | American colonies should be in-

#### The Answers

1. Two million, five hundred thousand. The payroll totals \$400,-000,000 a month, \$5,000,000,000 a

William H. Bonney. About 586,000 square miles.

North of the equator.

Spain. 6. St. Hubert.

7. Richard Henry Lee.

Do you know the new regulations on packages sent to men in the service? Here they are: You can send packages to soldiers anywhere in the U.S., although there are now Post Office restrictions on packages to overseas Army men; and you can send packages to men in the Navy, Coast Guard, and Marines, wherever they are. And when you send that package from home, remember-the gift men in the service always appreciate is cigarettes. And the favorite with men in the Army, Navy, Coast Guard, and Marines is Camel (based on actual sales records in Post Exchanges and Canteens). So stop in at your local dealer today-and mail him a carton of Camels.-Adv.

Most Nickels There are more nickels in circu-

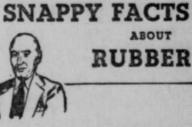
lation than any other U. S. coin.

The Vanguished

The discouraged are already vanquished .- Bishop Spalding.

Raw, smarting surface relieved amazingly by the soothing medication of

## RESINOL

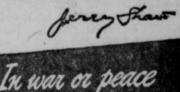


War workers cars are being checked in company parking lots by at least one manufacturer to make certain that tires are kept in serviceable condition. If the worker falls to have his tires recapped in time he is denied further explication either for tires

It takes three to eleven times normal distance to stop on snow or ice without tire chains, and you can't negotiate slippery hills with bere tires that spin on packed snow, waste gas and wear tires.

Each tapper on a rubber plation is responsible for about trees, which in one day's ping will net an average of pounds of latex, equal to al 17 pounds of dry rubber.

Automotive conservation authorities in New Hampshire boast of the re-duction of that state's tire needs by 57 per cent as an example of what can be done in saving rubber now



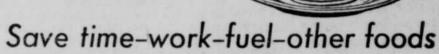
# **B.F.Goodrich**

FIRST IN RUBBER



Keep the Battle Rolling With War Bonds and Scrap

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MEALS!











AND REMEMBER,

FLEISCHMANN'S

AND D THAT NO

OTHER YEAST