



SUBSTITUTES

On this actual photograph of a North American AT-6A trainer in flight, the artist has marked off sections to illustrate assemblies built of steel and wood.

INVENTION

Better Inventions Aid U. S.; Hush-Hush Part of Planning

National Inventors Council Is Not Announcing Percentage of Ideas Adopted But It Tops Past Record

BETTER inventions, better planning for their use, is the summed-up verdict as to whether this World War finds the United States mobilizing its famed inventive power more effectively than in World War I.

The hush-hush of secrecy rolls up like a barrage around this subject of defense inventions. That is part of the better planning.

Outstandingly important is the National Inventors Council, which is not merely sitting back waiting for inventions to drift in. The Council has actively asked inventors who have brainchild devices of possible defense and war value to send them in, for the good of the country. And this time, the Government's advisers who sift inventions for an emergency are not trying to do inventing and research themselves, as an organization. Instead, they depend on American inventors, everywhere. Thus far, some 30,000 inventions and sugges-

tions have been offered. But don't ask details about what has proved valuable. That is information which goes on to the War or Navy Departments or other defense agencies that may be aided.

The low batting average of the inventing public in the first World War taught war agencies that they cannot expect amazing new war weapons to come in the mail by the dozen. Out of 110,000 inventions offered to the Naval Consulting Board in that war, all but 110 were rated worthless to the country on first examination. Eventually just one invention was used—a mechanism for testing airsickness in pilots. The War Department got 25,000 inventions, and found 25 worth serious attention. The burden of giving the nation new and improved war and industrial gear fell on research workers who had been working on this type of specialized problem. Still—there is always the chance that small or large inventions of national

value may pop up from unexpected sources.

Officials of the National Inventors Council are not announcing the percentage of new ideas being adopted by the armed services, but it is no secret that the present record has more than topped already the accomplishment during the past war.

Meanwhile, legal safeguards have been tightened to prevent defense inventions from leaking or reaching unauthorized foreign destinations. When this war broke out, any one could buy a copy of any United States patent and read the details for ten cents.

Now, patent officials say: "We are deliberately making things secret." For more than a year the law has authorized the Commissioner of Patents to withhold from publication and preserve in secrecy any application which would affect public safety. Inventors with such valuable applications on file are warned to keep the secrecy—or else.

The penalty for violating secrecy is a \$10,000 fine and two years in jail. Thus far there have been no convictions.

A similar penalty was clamped down, September 20 of last year, on any person who makes an invention in this country and files an application to patent it abroad, without getting a license to do so from the Commissioner of Patents.

Are Americans inventing for war? "Yes," says a patent official. "There is an increased interest in war inventions, and more patent applications on such subjects are filed now than in times of peace."

And what about foreign patents in this country? Can the United States Government use what German or other foreign inventors have tried to tie up by patent safeguards in our country? The answer is terse:

"Patents cannot interfere with the United States Government."

If there is an invention patented in this country by an American or a foreigner, which will aid the country now, that invention is at the disposal of the Government. Legally, no one can enjoin the United States from using any invention at any time. The inventor has exactly one recourse—he may go to the Court of Claims, and there he will be awarded reasonable compensation, if the Court finds it just. Meanwhile, the United States has used the needed invention when it needed it.

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China's *Burma road* was a migration route for animals and plants at the dawn of human civilization.