

# ON THE JOB



*Volume Production for the Nation's Needs*



IN PEACE \* IN WAR







M. E. COYLE  
General Manager, Chevrolet Motor Division  
Vice-President, General Motors Corporation

**W**HEN America entered the war, one of the first acts of the Government was the elimination of production of motor vehicles for domestic use. Chevrolet, the largest producer of passenger cars and trucks in the world, had a closely integrated system of manufacturing and assembly plants and a trained organization developed through thirty years of continuous growth.

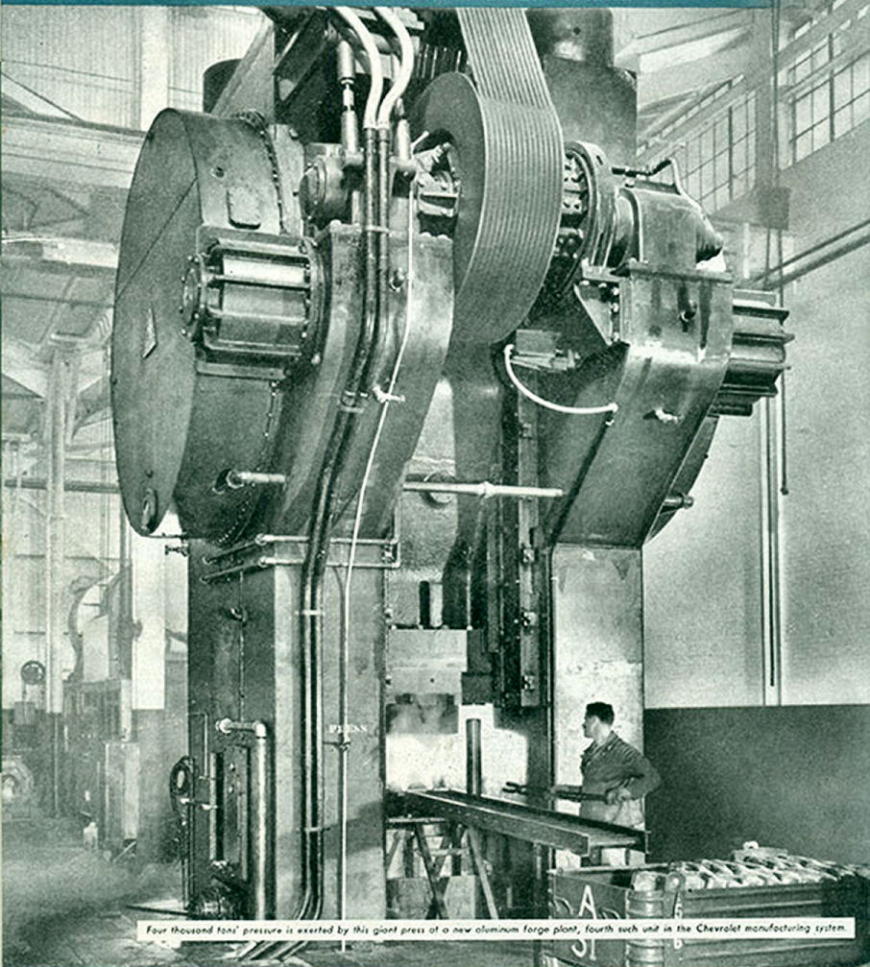
These production facilities were placed immediately at the disposal of the Government. Through conversion and realignment, and the installation of many new tools and machines, plants were transformed from their closely-related peacetime functions into a series of separate manufacturing operations to handle various armament assignments. During this vital transition, Chevrolet made every effort to maintain employment with a minimum displacement of operating personnel.

How well Chevrolet has met its wartime obligations, and the huge volume of war goods we have produced, are now a matter of history. Numerous citations have been received from our Government attesting to the performance record and the value of Chevrolet's contributions to the nation's war effort.

Every member of the Chevrolet organization may be justly proud of his or her part in this record of achievement under difficult and trying conditions. Many of our people are serving in the armed forces of our country, and some have made the supreme sacrifice. We who remain will carry on until our job is finished and the war is won.

Through the medium of this publication, we are recording a summary of our activities which should be an inspiration to each of us who contributes to "Volume for Victory."

VOLUME HERE FOR VICTORY "OVER THERE"



Four thousand tons' pressure is exerted by this giant press of a new aluminum forge plant, fourth such unit in the Chevrolet manufacturing system.

**ALUMINUM FORGINGS, VITAL TO AIRCRAFT, CONSTITUTE A MAJOR CHEVROLET WAR ASSIGNMENT**

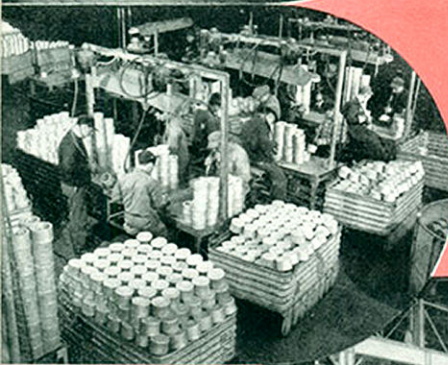




Forgings for crankcase sections for Pratt & Whitney aircraft engines here are shipped from a Chevrolet aluminum forge plant.



"Blades of war" in the modern sense. This crew means a 35,000-lb. hammer in a Chevrolet aluminum forge plant producing these propeller blade forgings.



A giant propeller blade is contrasted with standard models. Both sizes, and two others, are products of Chevrolet.



Aluminum pistons, here being burred after forging, are made in vast quantities at another aluminum forge plant.

**COMBINED OUTPUT OF FOUR  
BIG FORGE PLANTS MAKES  
CHEVROLET A TOP PRODUCER  
OF THESE ESSENTIAL  
"SINews OF WAR"**

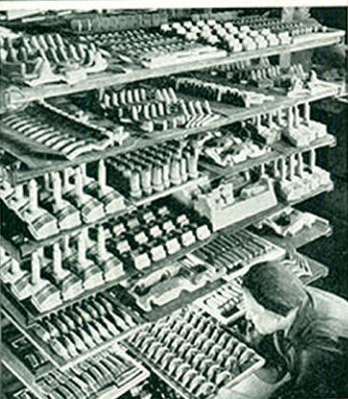
The blades that put the power into the wings of victory for the United Nations constitute an important war project for Chevrolet. This impressive view of one aluminum forge plant indicates the scope of this job.



## PRODUCING THE MIRACLE METAL OF WORLD WAR II



Conveyor-line pouring of molten magnesium speeds production in a Chevrolet foundry, where volume production is an accomplished fact.



▲ Like fancy pastries ready for the oven are these involved and intricate cores ready for baking of the Chevrolet magnesium foundry. The cores are aligned in the molds into which the molten magnesium is poured.

### MAGIC MAGNESIUM, LIGHTEST OF METALS, IS CAST BY CHEVROLET FOUNDRY MEN

High-volume technique in casting magnesium for aircraft engine parts is another war-important Chevrolet assignment.



➤ In magnesium, too, it's volume and variety with Chevrolet, as this stock pile of castings indicates.



At a bomber training station, Chevrolet-built Pratt & Whitney engines are shown being flight-readied by Air Corps mechanics.

**AIRPOWER IS HORSEPOWER ALOFT!**

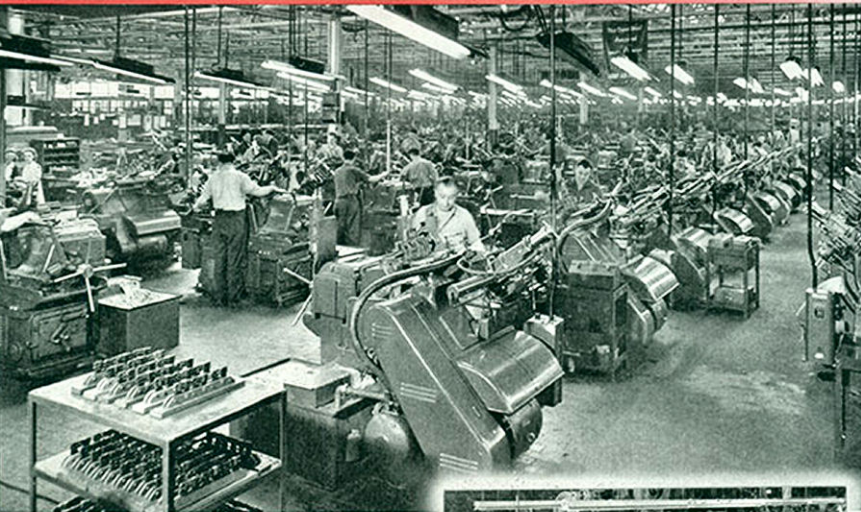


On one of the longest assembly lines in industry, Pratt & Whitney aircraft engines for bombers and cargo planes are produced by Chevrolet.

"Engines OK, sir!" is a familiar phrase wherever Chevrolet-built Pratt & Whitney engines power the bombers of our Air Forces.

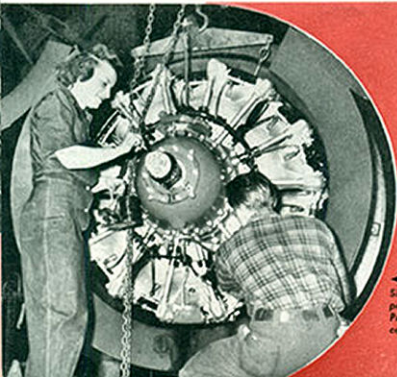
**SEVENTEEN PLANTS IN THE CHEVROLET SYSTEM  
UNITE IN THE PRODUCTION OF PRATT & WHITNEY  
ENGINES FOR BOMBERS AND CARGO PLANES**

## AIRPOWER IS HORSEPOWER ALOFT!



▲ More than 6,900 parts must be assembled into each Pratt & Whitney engine; hence parts production for its own assembly lines, as well as for other manufacturers', is distributed among 16 plants in the Chevrolet system.

→ Women play an important role in the production of power plants for the men who "fly for freedom." This group processes cylinder head air deflectors.



← Side by side with skilled technicians, women speed production of every stage of construction of the Pratt & Whitney engine. This girl, working in a test cell, helps mount engines for test runs.



↑ Teamwork keeps the Pratt & Whitney engines progressing "on the old assembly line," where Chevrolet men and women assemble "Airpower for Victory."



**CHEVROLET****UNITED EFFORT TO SPEED TOTAL VICTORY**

▲ A striking camera study is this picture of a girl employe burring cylinder heads for assembly in Chevrolet-built Pratt & Whitney engines.



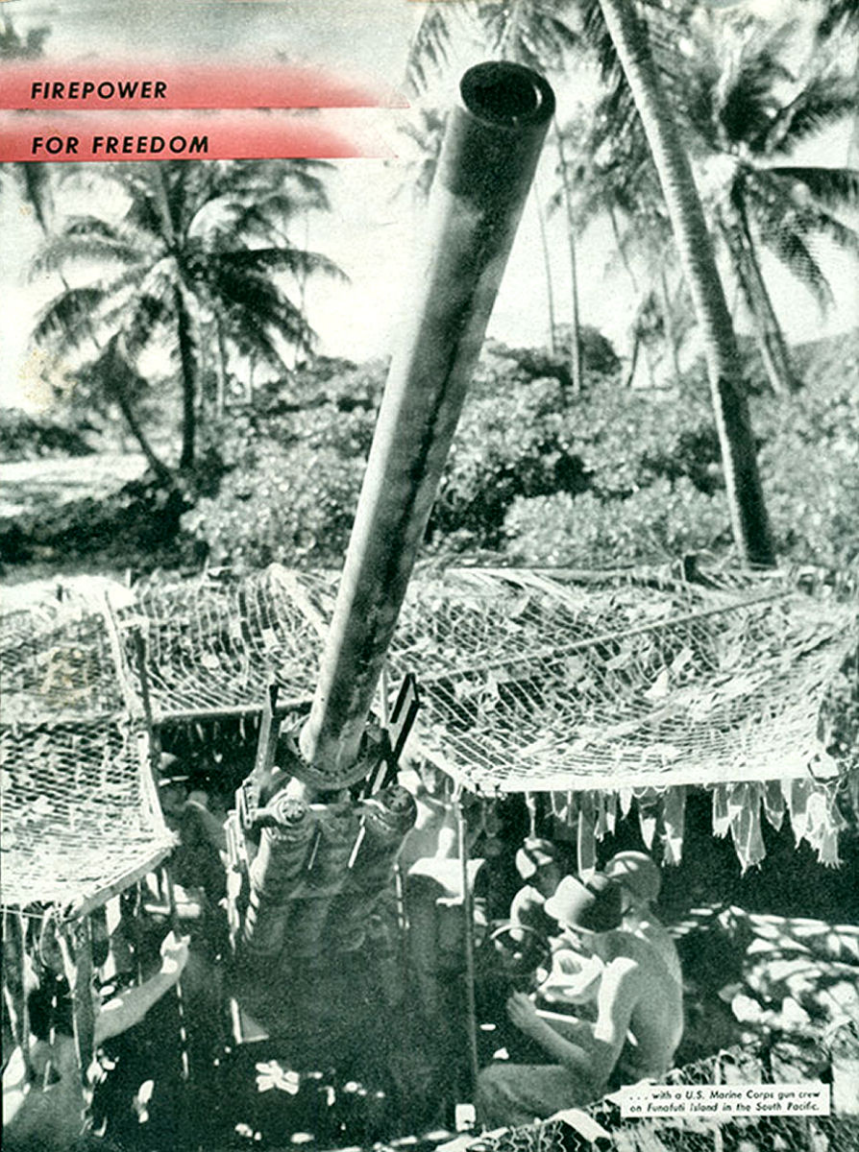
← So finely finished are these Pratt & Whitney engine gears, inspectors keep hands oiled with lotion so that fingerprints will not etch into the surfaces of the gears.

▲ These machine operators are machining valve tappet guides for the Pratt & Whitney aircraft engine in a Chevrolet manufacturing plant.

**CHEVROLET MEN AND WOMEN ARE WORKING AND WINNING TOGETHER TO PRODUCE THE PRATT & WHITNEY ENGINE, A GREAT STANDARD AVIATION POWER PLANT OF WORLD WAR II**

**FIREPOWER**

**FOR FREEDOM**



... with a U.S. Marine Corps gun crew on Funafuti Island in the South Pacific.



**THE 90-MM. ANTI-AIRCRAFT GUN,  
A DEADLY, EFFECTIVE CANNON,  
IS A PRODUCT OF CHEVROLET SKILL  
AND EXPERIENCE**

*For this weapon, dreaded by the enemy,  
Chevrolet workmen produce breech block,  
breech ring and recoil rails, and bore and  
rifle its 15-ft. barrel.*

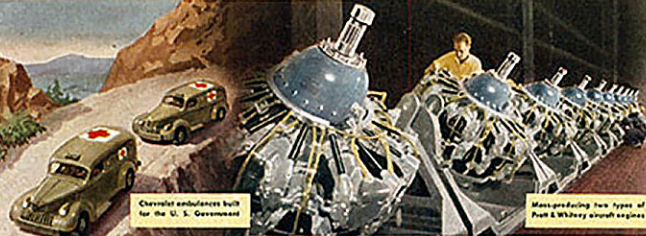
*Rigid inspection standards must be  
met by the 90-mm. gun, a dual-  
purpose weapon effective against  
enemy aircraft and tanks.*

*The Chevrolet volume ap-  
proach to every war assign-  
ment is typified in this photo  
of the machining of breech  
blocks for the 90-mm. gun.*



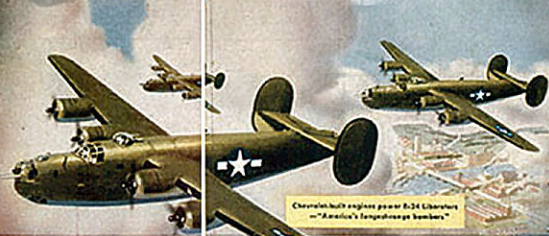
*A vast arsenal is Chevrolet. Here is one section of  
the plant devoted to the 90-mm. gun, showing  
some of the huge lathes needed for the boring and  
rifling of the gun tube or barrel.*





Chevrolet ambulances built for the U. S. Government

Manufacturing two types of Pratt & Whitney aircraft engines



Chevrolet-built engines power B-24 Liberators— "America's long-range bombers"



Millions of pounds of aluminum forgings every month



Household uses in use of cast aluminum— foundry plants operated by Chevrolet



Millions of high-explosive and armor-piercing shells

# "Volume Production for Victory" . . . an Accomplished Fact in Chevrolet AMERICA'S LEADING MOTOR VEHICLE MANUFACTURER PROUDLY RENDERS THIS REPORT OF ITS ACHIEVEMENTS IN WORLD WAR II

War production that antedates Pearl Harbor and that has grown in importance and variety since, building to an impressive flow of armament in the intervening months, is the story of Chevrolet in the war effort.

From military trucks and high-explosive shells—which Chevrolet was producing prior to December 7, 1941—to weapons so new they cannot be disclosed even today, Chevrolet has contributed to war production on a scale commensurate with its nationwide manufacturing facilities. More than 16 million square feet of floor space in Chevrolet plants are being devoted to war production.

Vital not only as a prime contractor, Chevrolet has facilities for sub-contracting, supplying more than 100 outside manufacturers as well as a score of corporate affiliates.

Chevrolet's assignments include two models of the Pratt & Whitney radial aircraft engine; 4x2 and 4x4 military trucks; parts and subassemblies for, as well as the assembling of, 6x6 trucks; armor-piercing shot; high-explosive shells; machining of gun tube, breech ring and block and recoil rails for the 90-mm. anti-aircraft gun, and volume production of a new weapon so radical that

its details have never yet been made public.

"Conversion," in the case of Chevrolet, has meant not only a transfer from peacetime to war production, but in addition has brought about important changes in the division's manufacturing system. For example: Asked by the Government to enter the aluminum processing field, Chevrolet in a period measurable in months has become a major supplier of aluminum aircraft forgings, now produced in four plants to supply virtually every aircraft manufacturer in America. Today Chevrolet is the second largest producer of aluminum forgings in the world.

Likewise, Chevrolet has entered the magnesium industry, devoting a division of its grey iron foundry to the production of magnesium castings, essential in aircraft construction. To this work Chevrolet has brought a foundry mass production, as differentiated from the chemurgical treatment that heretofore had been characteristic of magnesium output.

A variety of castings, some of them among the most complex ever poured, are produced here with well-established foundry techniques that have stepped up production to meet increasing demands. Side by side with its

magnesium output, the foundry is continuing its grey iron casting to supply other war needs.

For excellence in the production of high-explosive shells and armor-piercing shot, one Chevrolet plant displays the Army-Navy "E" awarded in mid-1942. A recent announcement of the second Army-Navy production award to this plant focuses attention on Chevrolet developments, in both design and manufacture, credited with improving the effectiveness of armor-piercing shot, speeding output and reducing cost.

An important assignment with Chevrolet is production of the 90-mm. anti-aircraft gun, one of the most effective American weapons. Effective at ranges in excess of six miles' altitude, this gun is also a deadly anti-tank weapon.

Chevrolet has concentrated much of its effort on Pratt & Whitney aircraft engine production, with 17 plants directly contributing to this project. Nucleus of this system are three plants in the East, which also have been awarded the coveted Army-Navy "E" for "high production achievement." To those three plants, 14 others feed parts and subassemblies, while at the same time producing other war goods.

Without fanfare, Chevrolet swung into connection with its Pratt & Whitney cargo plane engines, adding that activity to its already noteworthy output of bomber-type motors.

Chevrolet established an enviable record in connection with its Pratt & Whitney contracts, building its first engine just 25 days less than a year after the invitation to bid on the original contract. Since then, volume has accelerated steadily, and manufacturing economies have resulted in a cut of 50 per cent in the cost of these engines to the Government. Production has been increased fivefold.

While war production occupies Chevrolet almost exclusively, spare remains for the building of automotive service parts for the approximately 8,000,000 Chevrolet cars and trucks engaged in vital civilian service.

Chevrolet's list of customers under war conditions includes some of the best known names in war production. The importance of the division as a supplier and sub-contractor cannot be overestimated.

Yet it is as a prime producer of material for fighting men that Chevrolet demonstrates its wartime principle—"Volume Production for Victory."



90mm. anti-aircraft gun for America's armed forces



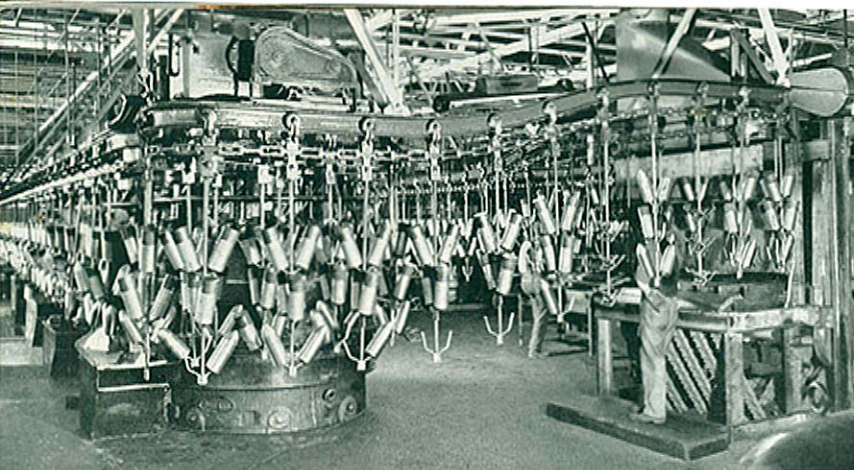
Thousands upon thousands of military trucks



Magnesium castings for aircraft engines

Chevrolet-built Pratt & Whitney engines power C-47 and C-53 cargo planes—"workhorses" of the air

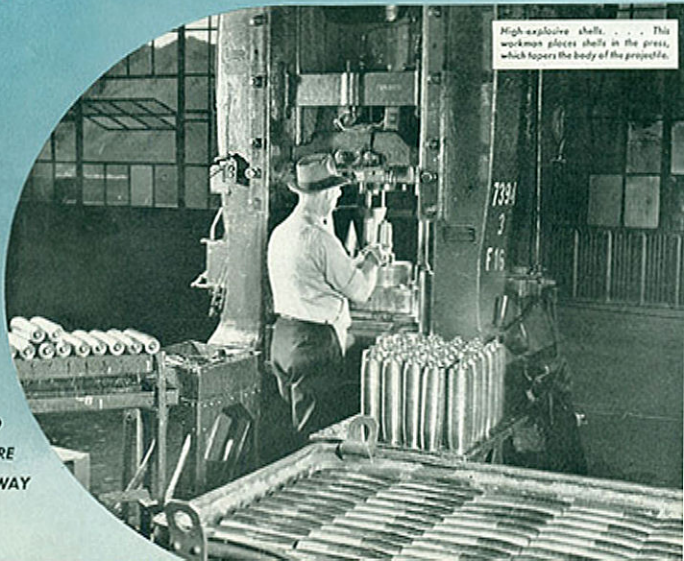




Armor-piercing shot. . . High-volume production—plus Chevrolet quality—earned the first Army-Navy "E" award in the Chevrolet plant system, for the production of

shells. This conveyor, traveling day and night with its load of projectiles, graphically portrays "Volume for Victory."

**ON THE JOB IN CHEVROLET . . . WHERE VICTORY BEGINS !**



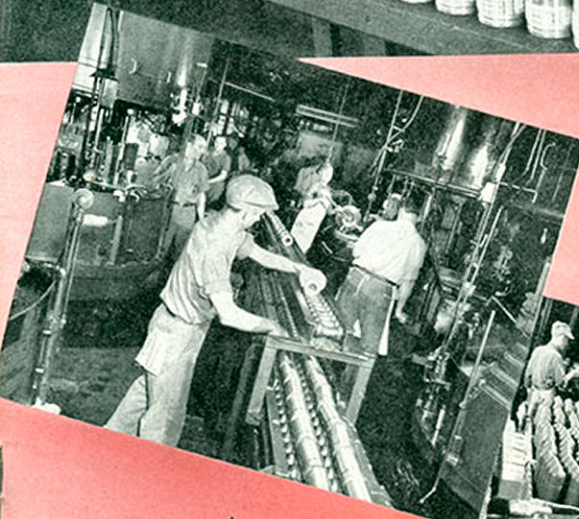
High-explosive shells. . . This workman places shells in the press, which forms the body of the projectile.

**MILLIONS OF  
SHELLS PRODUCED  
BY CHEVROLET ARE  
BLASTING THE WAY  
TO VICTORY**



Both 75-mm. and 3-inch armor-piercing shot are produced in volume by Chevrolet. These girls inspect the completed shot, now ready for painting.

**WHETHER ARMOR-PIERCING OR HIGH-EXPLOSIVE, PROJECTILES "BY CHEVROLET" MAINTAIN HIGH QUALITY STANDARDS UNDER TEST AND ON THE FIRING FRONTS**



Between these rows of multi-operation machines, armor-piercing shot bodies are sped on a sloping conveyor, progressing toward an inspection station.

Painted in "G.I. drab," the armor-piercing shot are packed four to a carton and shipped to loading plants. Carloads leave Chevrolet daily.





## VOLUME FOR VICTORY.



↑  
"Rolling stock" for an inevitable army... Chevrolet 4x2 and 4x4 trucks, versatile, hard-working military "dependables," are volume-produced in quantities which are limited only by war needs.

→  
Peacetime's busiest assembly lines still speed the products of Chevrolet skill—4x4 military trucks in this case—to those who must have reliable transport equipment.



←  
Doughtless American boys—hardy, fearless, eager—are precious cargo for Chevrolet military trucks.

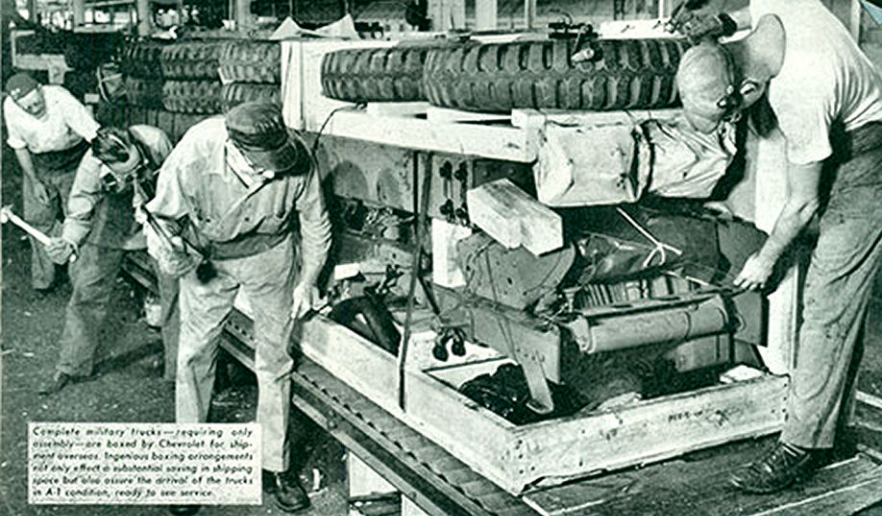
→  
Transfer cassettes for the 4x4 are stocked high around this machine, which mills both surfaces of the cassettes.

←  
Subassembly lines such as this brake drum line compose the feeder system for final assembly in a Chevrolet truck axle plant.



**FOR THE GREATEST MODERN MECHANIZED ARMY, AMERICA'S TOP-RANKING TRUCK PRODUCER, CHEVROLET, SUPPLIES TRANSPORT VEHICLES FOR MANY SPECIALIZED DUTIES**





Complete military trucks—requiring only assembly—are boxed by Chevrolet for shipment overseas. Ingenious boxing arrangements not only effect a substantial saving in shipping space but also assure the arrival of the trucks in A-1 condition, ready to use service.

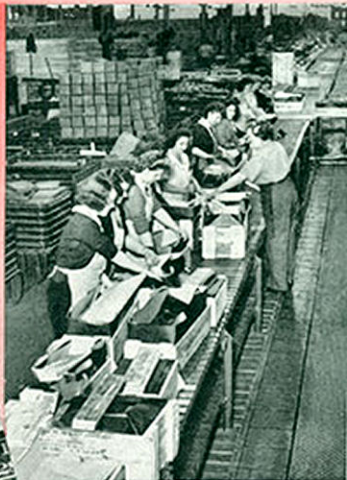
## Shipment and VOLUME HERE FOR A VICTORY "OVER THERE"



Truck parts are boxed here by Chevrolet workmen for shipment abroad. Parts are carefully wrapped and preserved against the elements.

Carloads of truck parts, skilfully crated against the weather and rough handling, roll from the Chevrolet export boxing plants daily.

Export boxing of trucks and truck parts has been developed by Chevrolet as a specialized science to conserve vitally-needed shipping space.



Women's deft fingers help speed the flow of movement to fighting men. For these well-wrapped and packed boxes contain parts for military vehicles.



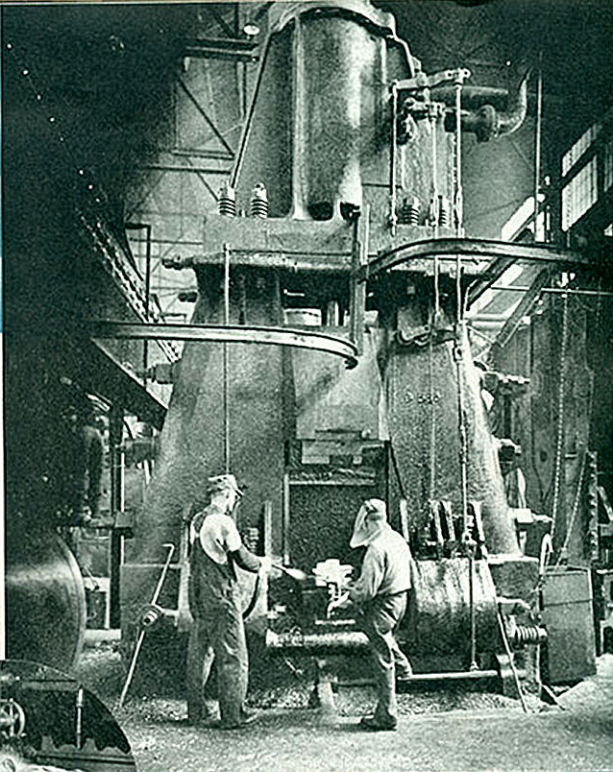
**AT WAR**

**ALL THE WAY**

**IN**

**CHEVROLET**

→  
Huge hammers in a Chevrolet forge plant produce the rough forgings for a wide variety of steel products.

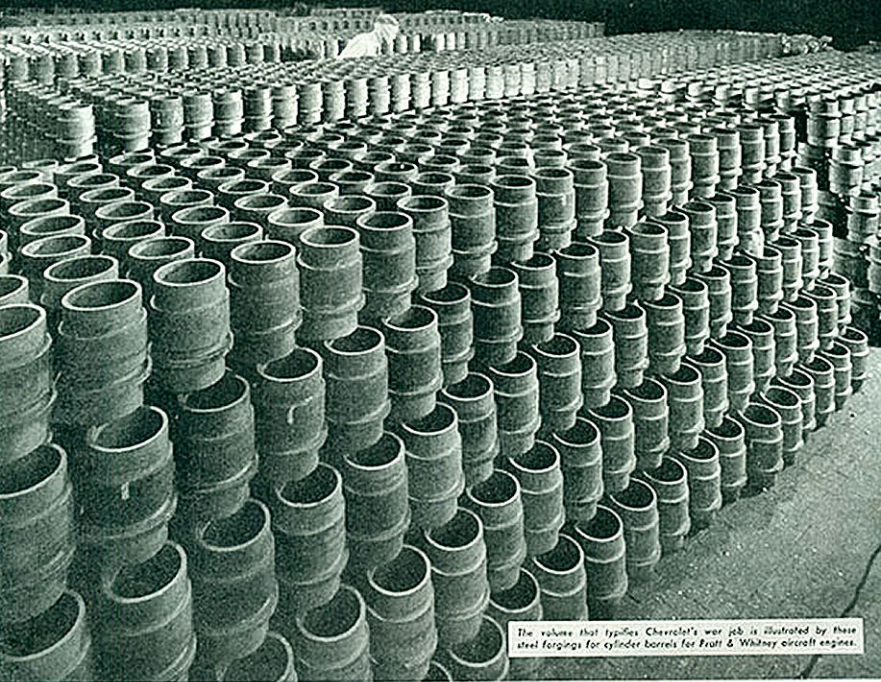


**STEEL IS THE BACKBONE OF WARFARE . . .  
CHEVROLET PRODUCTION OF STEEL FORGINGS  
IS AN ACCLAIMED WAR ACHIEVEMENT**

↑  
Die sinking precedes forging, whether the metal be aluminum or steel. Chevrolet is a major producer of dies, not only for its own forge plants, but also to supply many other producers of forgings.



→  
White-hot steel is here forged in an upsetter in a Chevrolet plant . . . where victory begins!



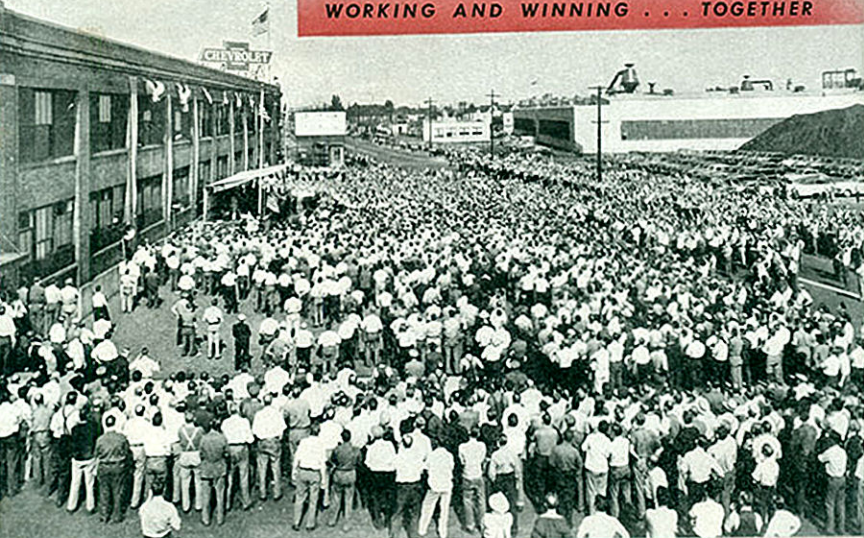
The volume that typifies Chevrolet's war job is illustrated by these steel forgings for cylinder barrels for Pratt & Whitney aircraft engines.

**V STANDS FOR VOLUME AND VARIETY IN CHEVROLET...**

*Working in steel, grey iron, aluminum and magnesium  
to forge the implements of war for victory-bound  
allies of the United Nations*



WORKING AND WINNING . . . TOGETHER



↑ In mid-1942, Chevrolet was awarded its first Army-Navy "E" pennant for the production of shells. This crowd witnessed the impressive presentation ceremonies and was awarded "E" pins.



↑ Presentation of "E" pins is made by this Navy commander of another Chevrolet plant honored for an outstanding production job.

→ In yet another plant, workers receive the "E" award, one of those presented to Chevrolet for the Pratt & Whitney engine job.

"FOR HIGH ACHIEVEMENT IN THE PRODUCTION OF WAR GOODS . . ."

Army-Navy "E" pennants fly over Chevrolet plants producing for Army Ordnance and the Army Air Forces.





**ANOTHER EXAMPLE OF CHEVROLET WARTIME VOLUME...**

*A consignment of armament ready for shipment to help blast the road to Berlin and Tokyo*



## "WAR COLLEGE"...IN CHEVROLET



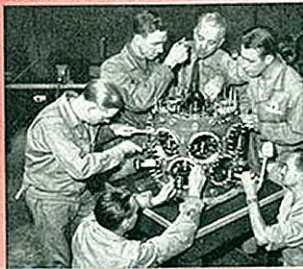
↑ Fighting men... trained men. Chevrolet provides not only the tools of war but the training necessary for the proper use of those tools. Above is one session of the Chevrolet Pratt & Whitney Aviation Engine School conducted for the Air Forces.



**5,955 OFFICERS AND MEN TRAINED BY CHEVROLET  
IN SERVICE SCHOOLS FOR ARMY ORDNANCE  
AND THE AIR FORCES**

↑ Chevrolet-built Pratt & Whitney engines, proper tools and equipment and skilled instruction are provided for Air Corps mechanics by Chevrolet.

➤ Able instructors worked closely with the Ordnance personnel enrolled in the truck schools set up by Chevrolet, held both in Detroit and at various Army bases.



↑ Working in teams, Air Corps mechanics receive thorough training in the proper servicing and maintenance of the Chevrolet built Pratt & Whitney engine.

**CHEVROLET'S PRATT & WHITNEY  
AVIATION ENGINE SCHOOL  
IS WINNER OF COVETED  
"EFFICIENCY" AWARD**



➤ One of the few industrial schools to be honored, the Chevrolet Pratt & Whitney engine training center now proudly displays this "Efficiency" banner.

R	LEO J. BELANGER	RAYMOND F. BELARSKI	CARLO R. BELL	MICHAEL
BURN	CLIFFORD BLALOCK	JAMES T. BOGGIO	ALBERT BOIKE	STEPHEN
ADY	STANLEY BRAZAS	ERWIN H. BREDE	FRED BRIDWELL	FRANK E
ASINSKI	SHERMAN J. BURDEN	AUGUST T. BUREIZA	WALTER BURMAN	MILLARD
	WILLIAM M. DANFIELD	HOWARD W. CARLSON	TONY CASTAGNA	JOHN DAU
	GEORGE H. CLARK	WILLIAM CLARK	LEROY COLMAN	A A CONST
SSLAND	ALFRED B. CROWE	ROY CUMMINGS	RUSSELL L. CUNNINGHAM	ALVAN M. G
DSON	MICHAEL DAVIS	MITCHELL DE LAIR	PHILIP J. DELLACH	THADDEUS
ROWSKI	TED W. EUSTICE	THOMAS E. DRAKE	THOMAS DUMAS	ROBERT
K	HERSCHELL B. DOWELL	MARION EVAN	PAUL R. FARLEY	STANLEY
CH	BERNARD C. FRITZ	DELPHIN B. FRITZ	ROBERT AUGUST FRITZ	MARSHALL
ON	JOSEPH GLETZMAN	CARL GOGOLEWSKI	JOHN GOLAS	LEO G. GO
VE	ALBERT GRINEVICH	PETER G. GRISTCHUK	ADOLPH R. GRYGLEWICZ	MITCHELL
EN	EDWARD R. HARNEY	RAY K. H	NORMAN M. HASHMAN	LLOYD C.
	JOSEPH HENSLER		STANISLAW S. HERULA	ARNOLD F.
EWINSKI	J. RICHARD HOLLA		E. HORNADAY	JOSEPH B.
IT, JR.	ARTHUR O. IKONEN		JOHANNESSEN	JOHN W. J.
Y	WALTER A. JUSKOV		KALLIO	URHO W. K
NAIRD	CHESTER A. KIRAG		KLEIN	EDWIN A.
OFF	STANLEY KOTENS		KOWALSKI	HENRY J.
N	MITCHELL J. KUK		KUNARI	JOSEPH C.
MAIE	EMIL R. LAHO		KPKA	ALBION J.
	JAMES A. LESLIE		LEWANDOWSKI	JAMES R.
CAS	WILBERT C. LUND		LETTERMAN	WILLIAM
VICH	FRANK T. MAY		LICH	SAM MICH
Y	CHARLES R. MUDD		MC DONALD	FRANK R.
	SIMON MADEU		MAJAYA	SAM A. M
MURPHY	CHESTER P. MUSZ		MAC DOUGALL	ROBERT
	WAYNE L. NIEMI		MEYER	FRANCIS
RIKOWSKI	TANCEL E. ORR			HOWARD
L	WALTER B. PATTER		PENROD	EARL C. P
ROL	WALTER M. PIEKKE		PIETRZKIEWICZ	EARNE J. P
S	GEORGE PRATER		EDWARD S. PRZEKOP	WALTER E.
	GUY C. RANNEY	LEON	LEO REAVES	JOSEPH
OLA	FRANK RIZZI	CLERAY L. ROBINSON	JOHN ROCCI	FRANK R.
S	JOHN ROURKE	CARL ROZWADOWSKI	FORREST G. RUBLEY	STANLEY
ERS	MALCOLM P. SAGLER	JOHN SAOLOWSKY	JOSEPH SADOWSKI	FRANK S.
MIEGE	STANLEY E. SCHRADER	RALPH O. SOHRAY	AGAINES E. SCOTT	HANLON
	EDWARD S. SILJANDER	SINO E. SILJANDER	SINO W. SIMILA	WALTER
TH	THODORE B. SMOLINSKI	CHRISTOPHER J. SOAVE	JOHN J. SOKOLOWSKI	VICTOR S.
EFES	LUTHER B. STEWART	HARRY C. STODH	SANFORD R. STRATTON	JOHN H.
TUTZ	RICHARD R. SOPALY	EDWARD P. TAKALO	WINCENT TAMBURRO	WALTER
SPON	ROBERT C. THRASHER	KENNETH C. THORSON	CARL W. TIMMONS	LAVREN
BN	JAMES L. THOMAS	ALLEN A. TONBY, JR.	PAUL J. TREANOR	JOHN J.
VEN	BURON L. WANDELL	LAWRENCE A. WARNER	JOHN WARREN	WAINO N.
	WILLIAM C. WEBER	DOLOIS WEBR	DOLLAS WEST	MELWYN
LEWSKI	OSWALD ER WACHNEWSKI	S. J. WOOLSTON, JR.	WENDESTER WRUBEL	WALTER
	WARREN YOUNG	JOHN W. ZACKIEWICZ	CARL ZAPAROFF	MICHAEL
SINGER	JULIANA A. ORGE	THEODORE GALBY	WILTON H. GRIFFIN	JAMES
YER	JOHNNIE ROBERTS	WALTER W. SOBERBERG	JOHSON D. SOMERS	WOODR
OLA	FRANK M. SULLIVAN	FRED SPENCER	LEONARD TOMASZEWSKI	DONALD
TOW	ROBERT O. BURNS	EVALD P. WITT	RAMON ALCINI	RICHAR
			WOLFF W. WEXLIANO	JOHN

"HOW PROUDLY WE HAIL"

★  
 THE  
 9,160 MEN AND WOMEN  
 OF CHEVROLET  
 WHO ARE SERVING THEIR COUNTRY  
 IN THIS, OUR FIGHT FOR FREEDOM

★  
 AND PAY TRIBUTE HERE TO THOSE  
 AMONG THEM WHO HAVE MADE  
 THE ULTIMATE SACRIFICE



*"We are fighting a tough war, and everything we do must be directed toward winning that war."*

GENERAL DWIGHT D. EISENHOWER

