Fitments Aid Handicapped Drivers

Changing Car Controls to Enable Crippled or Deformed Drivers to Enjoy Their Cars

BY ED. TECHNICAL

As an aftermath of the great war, we have received many letters in regard to ways of making it easier, for those who are handicapped by the loss of an arm or leg, to drive Ford cars. At first most of these letters came from Canada, and then they began to come from widely scattered parts of this country. Such letters have been answered individually with particular care and attention and, in our quests for information, we have gathered much data—some of which is presented here as being of help to Ford agents and salesmen in making it easier for handicapped drivers to operate Ford cars.

Let's consider the question "Whether crippled drivers should operate automobiles?"

In our opinion there are various kinds of cripples. The *mental* cripples are those lacking in plain common sense—you'll find them driving cars on every road. The Fool-killer catches them quite frequently—but not often enough. The second class of cripples are those *morally defective*. A road hog is crippled in the instincts of being a gentleman, and is often a serious menace to other drivers. These two classes are the real *cripples*, as they are lacking in those fundamentals which distinguish man from beast.

Now those who have been unfortunate enough to lose the use of a hand or leg may be classed as cripples by the dictionary but, when they have the minds and souls of gentlemen, they are twice worthy of our admiration. Many a genius has proven that physical handicaps can be overcome. And the greater the struggle, the greater is the victory.

Without Right Arm

THE fact that a Ford can be easily driven with one hand is frequently demonstrated by moonlight drivers. Once upon a time, when we modestly suggested that we might be able to drive with one hand, the girl-in-the-Ford replied "Lemme drive—and you can use both!" Why wonder then that boys-leave-home on moon light nights.

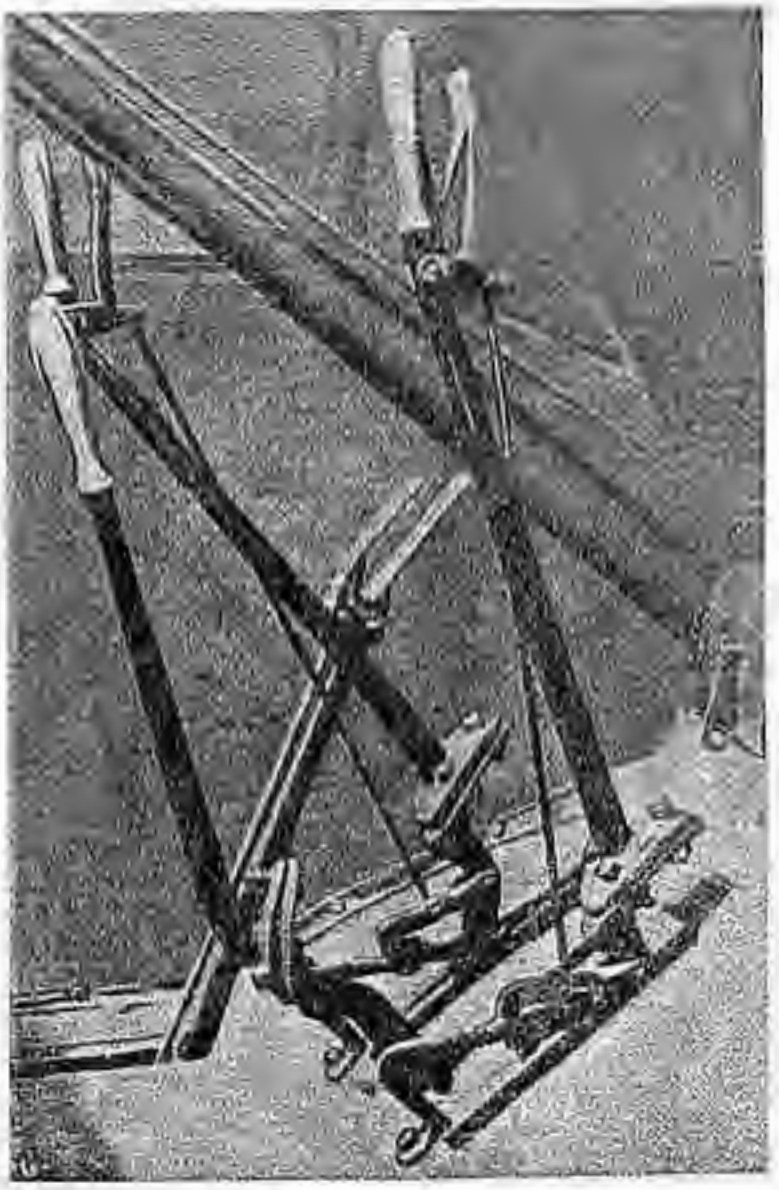
Ever since meeting the "the noblest woman in the world," we have smiled indulgently when passing one-handed drivers. We suggest that those who are deprived of the use of the right arm should fit a good accelerator, as this makes it unnecessary to reach the hand throttle and makes it easier to drive the car. Also, the push button for operating the horn should be placed on one of the spokes near the rim of the steering wheel on the left-hand side, thus making it possible to blow the horn without moving the hand from the steering wheel.

Without Left Arm

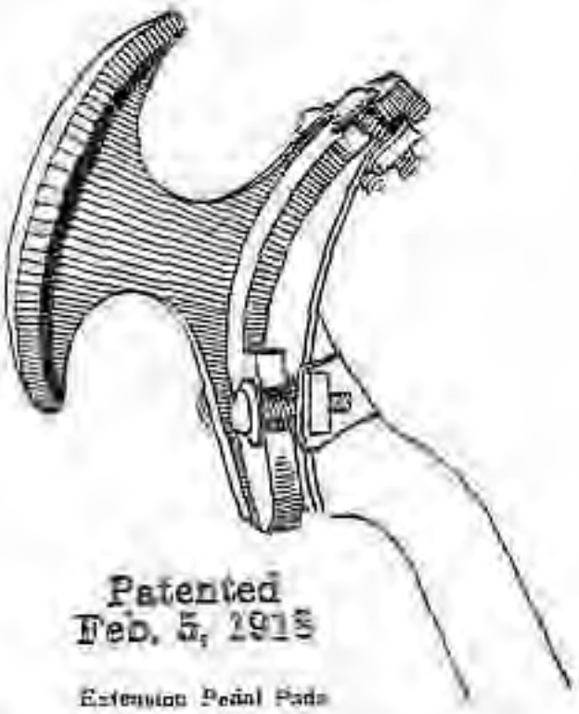
THOSE drivers who are deprived of the use of the left arm will find it convenient to install some form of single-spark battery ignition, system, such as Bosch, Atwater-Kent, or Delco having an automatic governor to advance and retard the spark according to the speed of the engine. With such an automatic spark control, it is seldom necessary to touch the spark lever—save when starting the engine. This makes it easier for those deprived of the left arm to drive a Ford car well.

Without the use of the left arm, it is difficult to operate the hand brake lever, and so some form of ratchet stop for the clutch pedal is convenient. A ratchet can also be used on the foot brake pedal to hold the car at rest.

With the horn button placed on the spoke of the steering wheel, within reach of the driver's thumb, the control of the Ford thus becomes very easy.



Hand Levers for Pedals



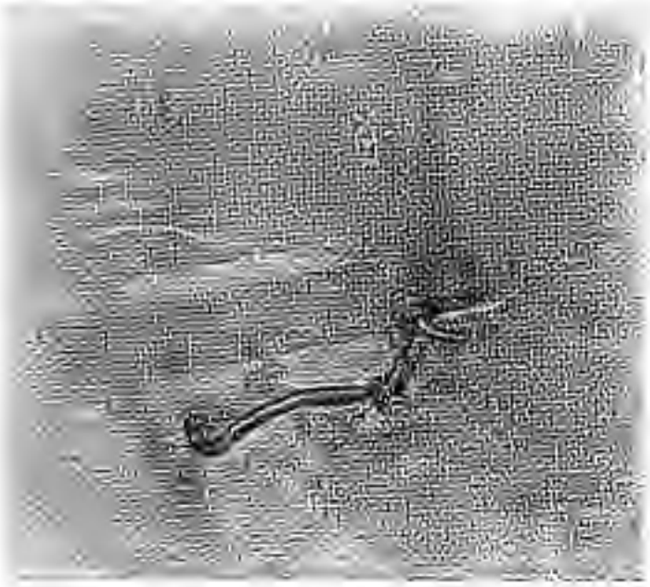
Extension Pedal Pads

Another method of making it easy to control the spark lever with the right hand is shown in patent No. 1,303,653 to Endel Godlave, of Amistad, New Mexico, with lever extending over to right-hand side.

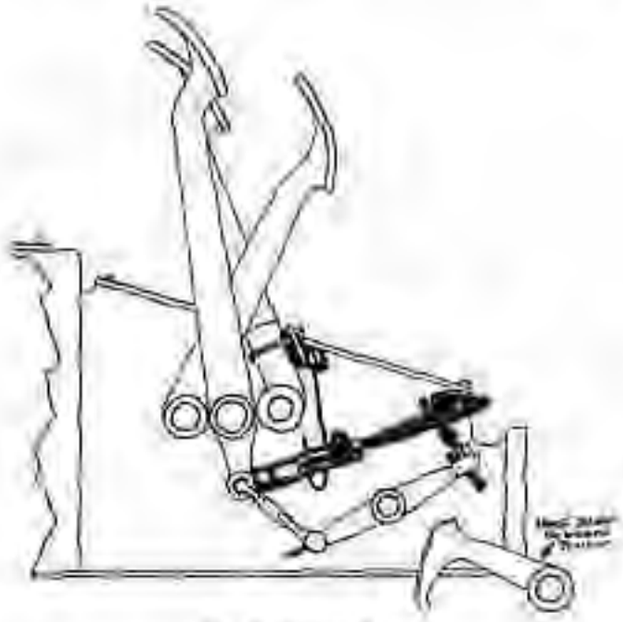
The Pedloc controls the clutch pedal, locking it in neutral, low or high gear at the will of the driver. By giving the driver positive control without the necessity of holding the clutch pedal in position with his foot, such a device is convenient for the disabled driver.

The Pedloc is furnished complete with steel floor board, which cannot split or warp out of shape. The clutch can be thrown into neutral and kept there without pulling up the emergency brake. This allows reversing to be done by moving the foot from the reverse to the brake pedal. The pedloc permits the car to be driven steadily up long hills or through sand on low gear without the need of pressing on the slow speed pedal.

Another type of pedal latch, for which Patent No. 1,416,338 has been granted to Fred C.

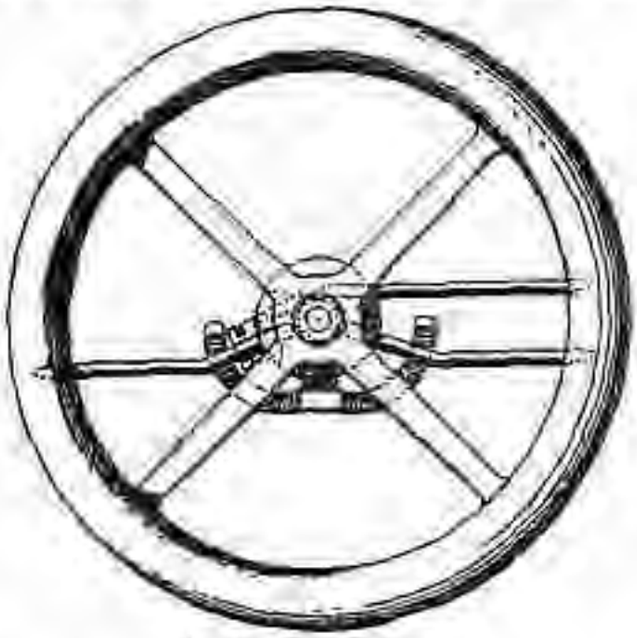


Noble Safety Brake



Clutch Neutralizer

Denham, Wellington, England, is for a ratchet to be clamped to the clutch pedal, while a wire



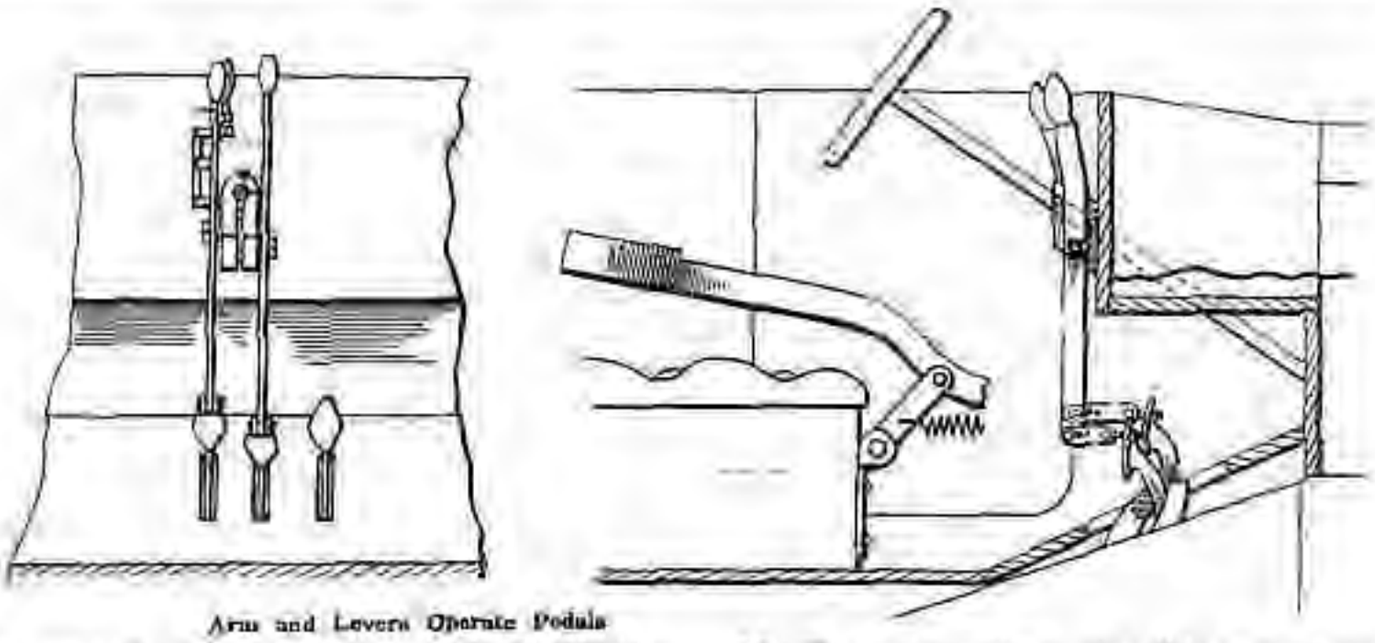
Spark Lever Extension

loop or stirrup is designed to be thrown forward to engage the ratchet when it is desired to hold the pedal in place.

The Neutralizer is a connection between the clutch and brake pedals which makes it easy for the driver to find and hold a positive neutral. In order to locate a permanent neutral, simply push the gear shift pedal into approximate neutral, and press down the brake pedal to check the momentum of the car. While holding the brake pedal down, release the clutch pedal, and the transmission will shift automatically into neutral. A slight forward pressure on the clutch pedal releases the hook at any time.

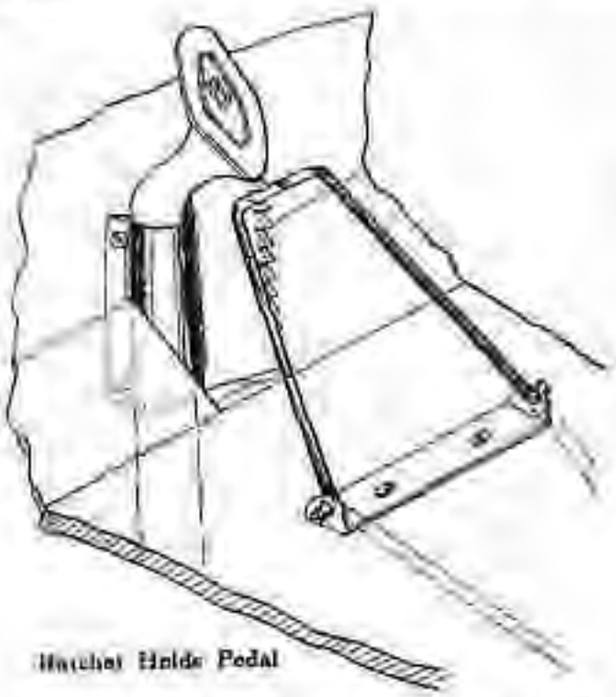
Without the Feet

WHEN both feet are disabled then it will be necessary to use hand levers to operate the three pedals, as shown in the various patents in this story. In patent No. 1,446,660 issued



Arm and Levers Operate Pedals

to Lewis J. Quay, of Schenectady, N. Y. the pedals are operated by flexible wire cables passing over pulleys attached to the dash near the bottom of the steering column. These cables pass onto drums, actuated by levers with a ratchet control, so that the pedals can be held in any desired position.



Ratchet Holds Pedal

To Emmy H. Stocking, of Washington, D. C. has been granted patents No. 1,463,853 and No. 1,526,377 for arm operated brake control for Ford cars. The clutch and reverse pedals are operated by hand levers pivoted on a bracket attached to the steering column. The clutch pedal control lever has a ratchet (released by a hand latch) so that the clutch pedal can be retained in any position.

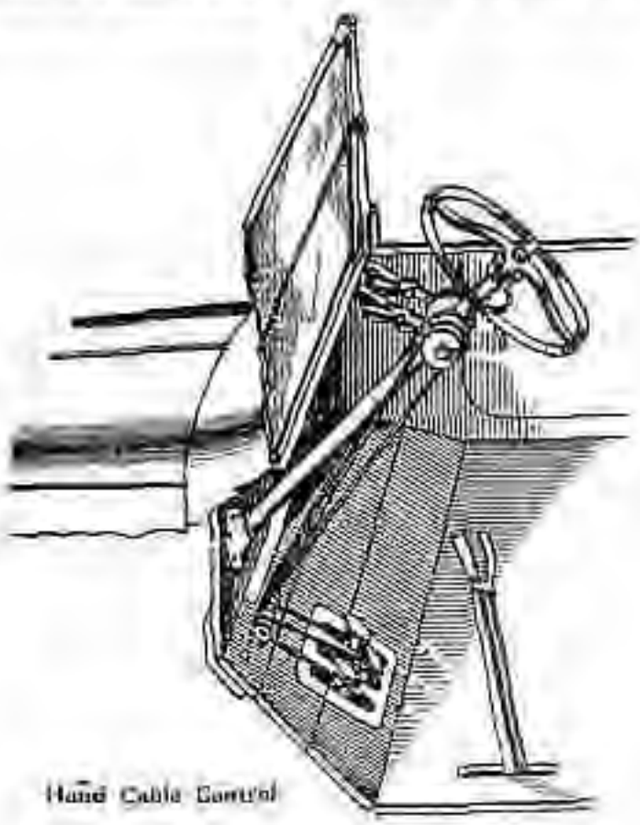
Levers Press Pedals

Mr. J. F. Thompson, of Elizabeth City, North Carolina has received patent No. 1,496,138 on a set of three levers to be pivoted on a bracket bolted to the steering column and the floor. The lower ends of these ell-shaped levers press against the pedals, when the handles are pulled towards the driver.

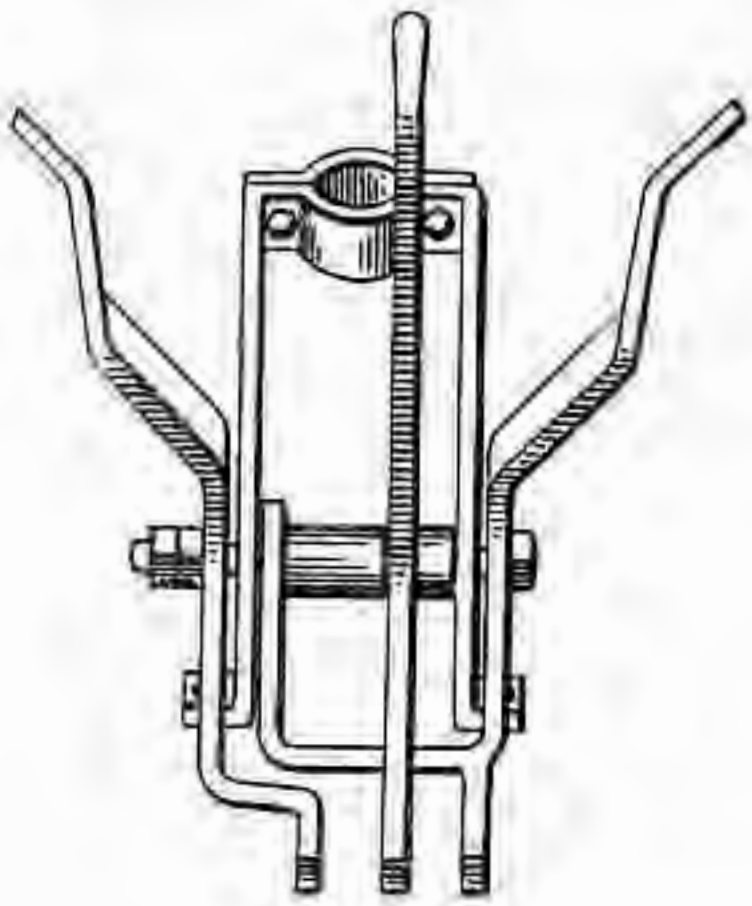
Mr. Thompson reports using this arrangement since February 1918, and that he has been able to drive his car in the most congested traffic as safely as any one with the full use of feet and lower limbs. The patent is for sale.

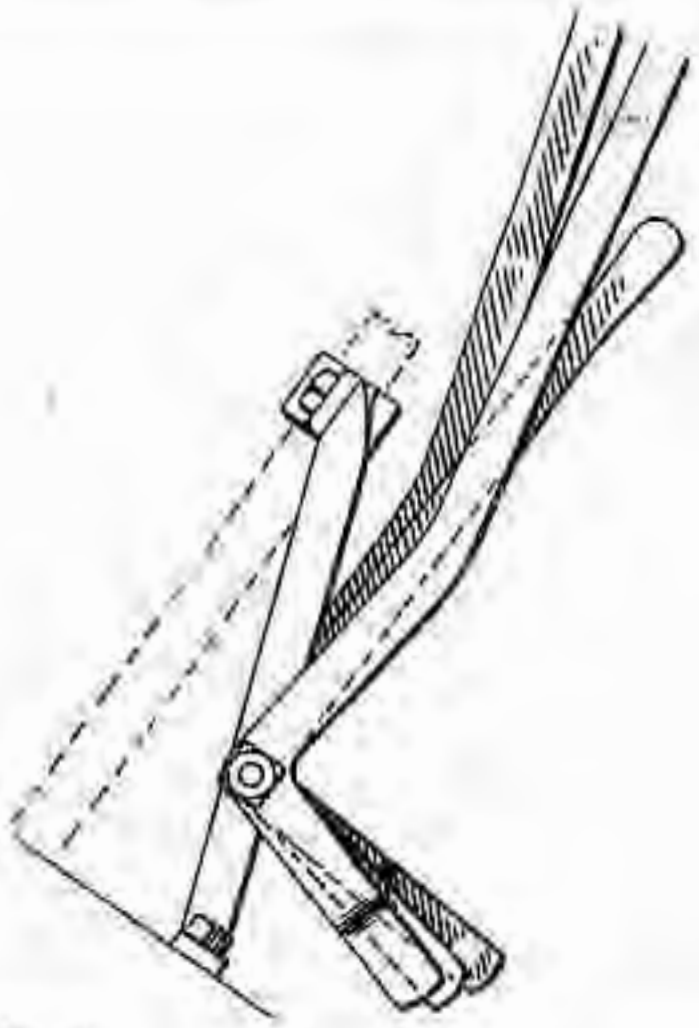
If the driver is only deprived of the use of his right foot, we suggest that powerful rear hub brakes, of the contracting band type with large drums, be used. These brakes to be connected with emergency or hand brake lever and to be regularly used for stopping the car. When using the engine as a brake on steep grades, the left-footed driver can lightly press the reverse pedal with his left foot to obtain better braking effect.

When the driver is without the use of his left foot, then we suggest that the brake pedal be connected to the clutch by means of a chain or other device, so that the application of the foot brake will disengage the high-speed clutch, thus enabling a quick stop to be made. A steel lever



Hand Cable Control





Thompson Hand Lever Control

can be attached to the clutch pedal, to allow low gear or high speed to be engaged at the will of the driver.

The Noble safety brake interconnects the hand brake and foot brake in such a manner that the application of the hand brake also pulls the foot pedal forward and applies the transmission brake. This is convenient for drivers deprived of the use of the right foot, as it enables the foot brake to be applied more easily.

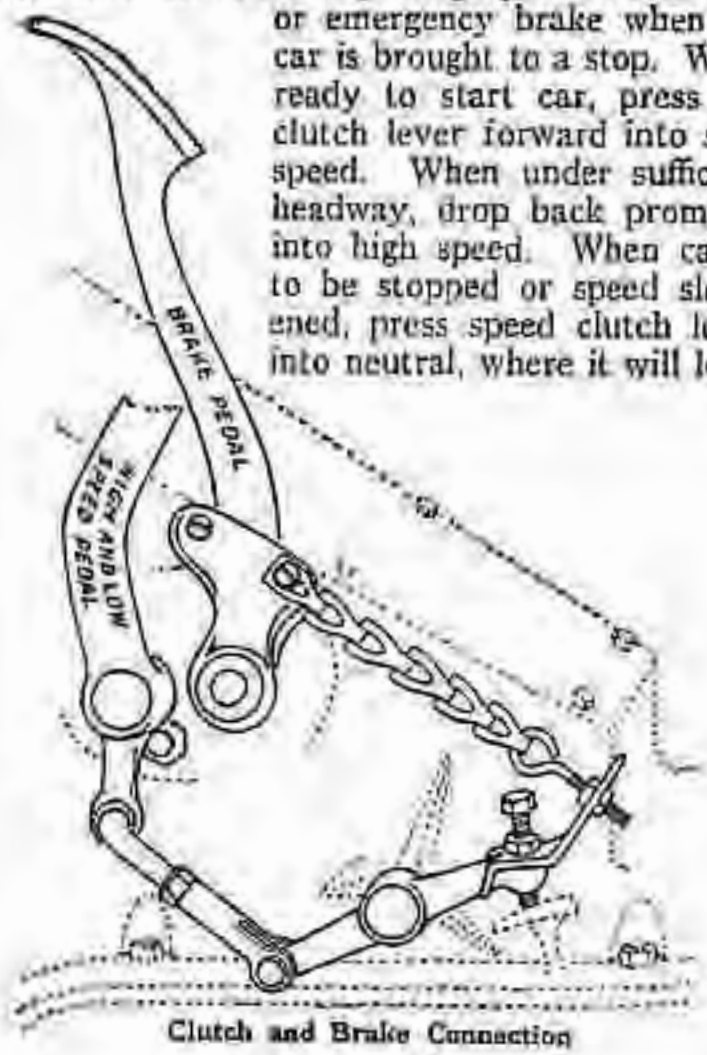
Pedloc Clutch Control

Carmody Hand Control

In early life, J. C. Carmody was so injured that he found that he could not operate a Ford safely by foot control. With hand control, he has operated his car everywhere a car could go, and has never had an accident. This is an exclusive hand control, and the feet do not enter into its operating in the least.

A feature worth mentioning is the ratchet controls of the slow speed and brake pedal levers. By pressing forward the slow speed lever, it will lock and remain so until the top of a steep grade is reached, when it can be dropped back into high speed. In going down a steep grade, the transmission brake is pressed forward where it locks, and the speed of the car is retarded until level road is reached.

To operate the Carmody hand control: Always have clutch locked in neutral, first ratchet on quadrant, where pawl will hold it firmly while the engine is idling or not running. This does away with the need of pulling up the hand lever or emergency brake when the car is brought to a stop. When ready to start car, press the clutch lever forward into slow speed. When under sufficient headway, drop back promptly into high speed. When car is to be stopped or speed slackened, press speed clutch lever into neutral, where it will lock.



Clutch and Brake Connection

Poor Guessing

BY ERMON MILAND PECK

ST. PETER stood, forbidding, stern,
Within the Pearly Gate,
And eyed a spirit, come to learn
The depth and breadth of fate.
"You owned some flivvers, did you not?"
The Saint's first question sped.
"I did, Your Saintship! Quite a lot!"
The spirit meekly said.
"And when you got a punctured tire,"
St. Peter then pursued,
"Or sixteen bills aroused your ire
For policies renewed;
When road-hogs threw a sudden fright,
Or coil-points got all wet,
Or headlights dazzled you at night,
Or herds of cows were met;
When carbon made you lose your power,
Cold weather made you crank;
Or wifie let you wait an hour,
Or gas had left your tank;
When you were caught twelve miles from home,
No top, and pouring rain,
And surging thoughts beseiged your dome.
Were you at all profane?"
"O Saint, I pray I'll make you see
That I've not been a dunce!
When things you've said all came to me,
I never cussed them once!"
Said Peter, "Where you got your code
Of morals I don't know!
You're far too dumb for this abode!
They'll use you down below!"

(Continued from Page 59)

Now press brake lever forward gently, and car will come to a stop. Owing to the length of these levers, the leverage is so great that but a very light pressure is required.

The middle lever operates the reverse and is not connected with a quadrant for the reason that if, in backing the car, the lever became locked, the car might go back too far and cause an accident. By holding the hand on the lever and pressing it forward, the motion of the car will be reversed. By taking the hand off, the lever will drop back into neutral. Mr. Carmody would like to get into touch with a reliable firm for placing this device on the market.

Those who are short of stature and find the Ford pedals difficult to reach can either place a wedge-shaped cushion against the seat back, or use extension pedal pads which bring the pedals a couple of inches nearer to the driver.

Such extension pedal pads can be placed on all three pedals if desired. Or only on the brake pedal, if the driver's right leg is a little shorter than the other.

Sandy Roads Snagged Other Cars But Not This Ford

Old Car Proves That It Still Has Ability of Youth

BY GEORGE PARKO

A "FREELANCE" writer, touring through Florida, found the deep sand by-roads hard to negotiate with a large car, so looked around for a used Ford which could be rebuilt to specifications the situation required. A 1908 touring car, in use continually since its birth, was found in the possession of a colored family. It was a remarkable contraption, the frame, engine and running gear being ready to part company at any time, while the upper part was a fantastically

designed construction of pine boards and canvas, nailed and fastened together with wire.

First the car stripped to the bare engine and chassis, the frame welded and riveted and a temporary body of heavy timber put on for the tryout. Many were the defects and weaknesses discovered, but the old car ran fairly well, pulling better than some of the newer makes.

A new radiator, hood and tires helped the appearance of the car, and a body was constructed particularly adapted to photographic work in the field. The condemnation of highway signs in the section where the work was being done, provided material for the body, already painted for the final coat. A windshield from a $1500 car was bought from a junk dealer, other parts salvaged from the city "dump", and the top built of cypress flooring, canvas and gaspipe. With the addition of a number of "accessories" the final result was all that could be desired.

The old car, rejuvenated with new "innards" shock absorbers and many coats of paint, pulled through the worst detours and made speed enough to pass many late models of the same make. The top was built to hold the tripod, camera and operator, affording a high vantage point for viewing the scenery. The color of the outside was dark green, rendering the car inconspicuous in the typical tropical vegetation of Florida.