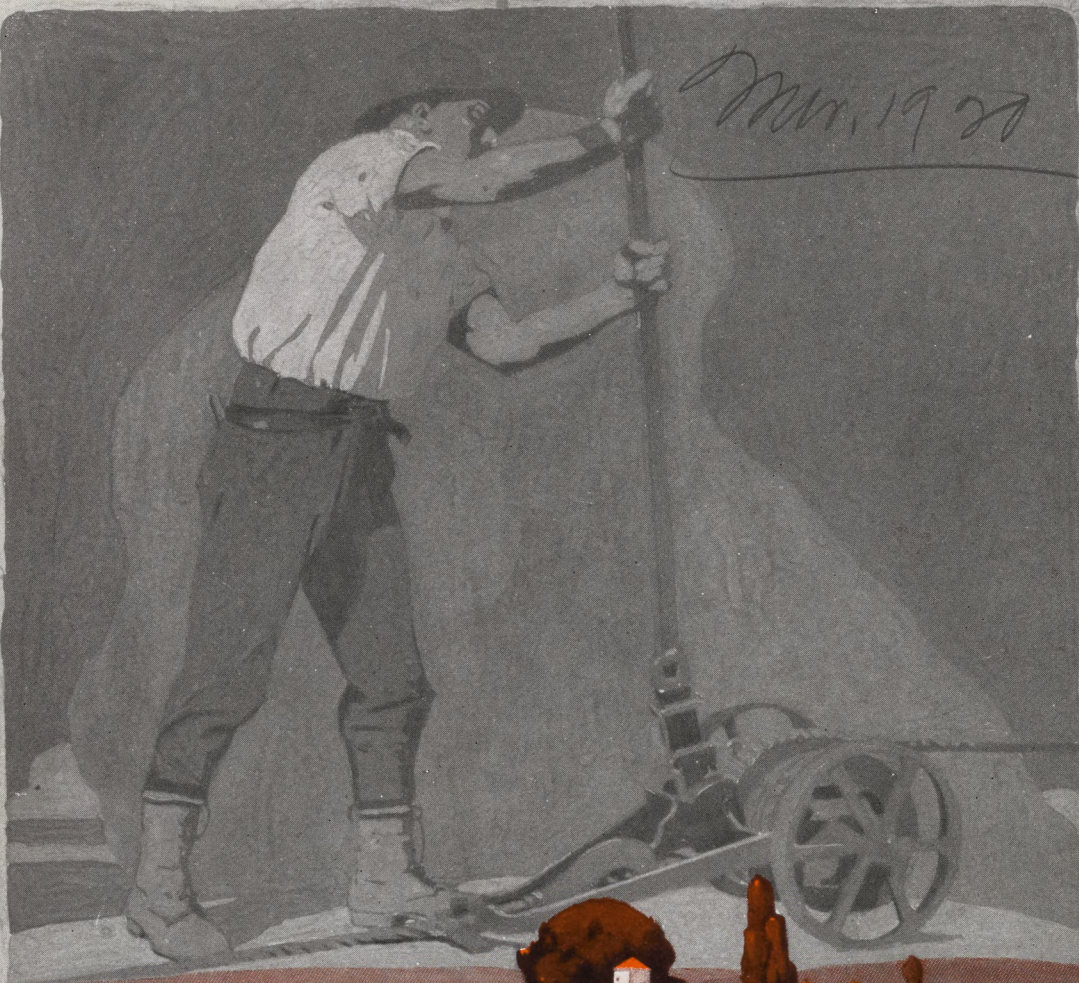


Mohr Steel Co.

Mar. 1928



John Kelly

BULL DOG
a new and better
STUMP PULLER
Hand and Horse Power

NAL GIFT
AUGUST 1964

BULL DOG STUMP PULLER

MR. ED. CAMPBELL,
Graton, California.

OUR GUARANTEE

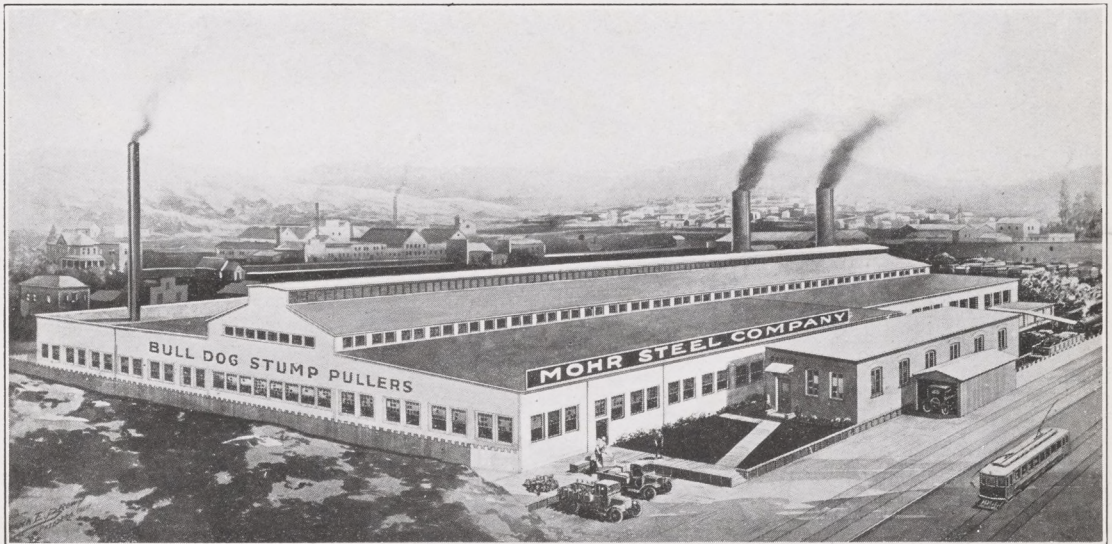
- 1 We guarantee the safe delivery of the BULL DOG to your freight station, and will make good any loss or damage in transit if properly noted by the agent on the freight bill.
- 2 We guarantee the high quality of the BULL DOG. We guarantee that it is built of the best materials on the market, and along the newest principles of construction; that each machine has been thoroughly tested in our factory before shipment to you; and that it will perform exactly as specified in our catalogue.
- 3 We guarantee to replace, free of charge, f. o. b. our factory, any casting that may break, flaw or no flaw, within 3 years.
- 4 We guarantee that the BULL DOG will develop the power claimed for it, the hand machine from 30 tons with one block to 60 tons with two blocks; and the horse machine from 60 tons with one block to 90 tons with two. Upon evidence to the contrary and the return of the BULL DOG to us at our expense, we will cheerfully refund you the price of the machine with interest at 6% on your investment.
- 5 In case of breakage our liability is limited to replacement only.

MOHR STEEL COMPANY.



President.

MOHR STEEL COMPANY



The Bull Dog factory. Here the crude metal is worked into the steel parts that make up Bull Dog Hand-Power and Horse-Power Machines



ITALIAN AMERICAN BANK

COMMERCIAL AND SAVINGS

SAN FRANCISCO, CALIFORNIA

December 9th
1919

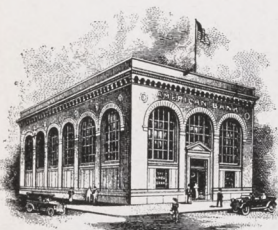
TO WHOM IT MAY CONCERN:

We know the Officers of the MOHR STEEL COMPANY to be successful men of ability and integrity, and we have every reason to believe that they will carry out any contract made.

They have had years of manufacturing experience, and their product is in very popular demand. They are experienced builders of stump pullers which are used all over the world, and we consider their products as being high-class.

ITALIAN AMERICAN BANK

Cashier.



ESTABLISHED 1910

AMERICAN BANK OF TRACY

FORMERLY WEST SIDE BANK OF TRACY
COMMERCIAL - SAVINGS - SAFE DEPOSIT
CAPITAL \$150,000.00

T. O. MOORE, ASST CASHIER
L. O. STARK, ASST CASHIER
C. S. SELNA, ASST CASHIER
DOROTHEA O'NEILL

Tracy, Cal. Nov. 25th, 1919.

To Whom it May Concern:

This is to certify that we have been personally acquainted with Mr. Rudolph Mohr, Jr., President of the Mohr Steel Company, for a great many years, and know him to be absolutely reliable and trustworthy.

Under his management we feel that any business he undertakes will be managed with ability and unquestionable integrity, and we are sure that any guarantees signed by him will be conscientiously fulfilled to the letter.

We know that you will make no mistake in purchasing equipments manufactured by his company.

Respectfully submitted,

THE AMERICAN BANK,

President.

EXPERTS ALL



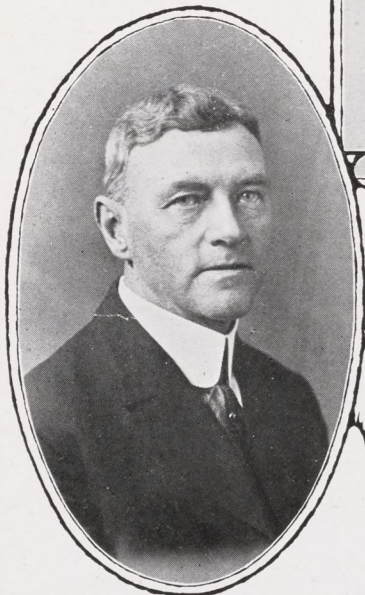
W. E. Jewell
Vice-Pres.



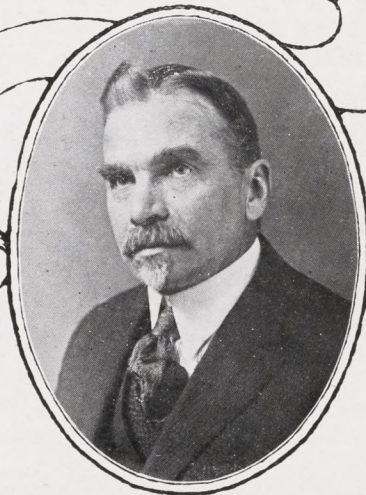
R. Mohr Jr. *President*



A. Haase
Secty.



J. M. Finlayson
Treas.



B. H. Barber *Master Mechanic*

THE MEN WHO MAKE THE BULL DOG STUMP PULLER

ON the page opposite are shown the photographs of the five men who have developed and built the Bull Dog Stump Puller. These men are experts. Together they compose the best brains in the business of manufacturing stump pullers. For years these men, individually, have built stump pullers for other manufacturers. They know stumps. They understand the problem of pulling them. They know how to build stump pullers. Together they formed the Mohr Steel Company of San Francisco, California, which manufactures the new Bull Dog Stump Puller, both hand-power and horse-power machines.

Mr. W. E. Jewell, vice-president of the Mohr Steel Company, is an expert on steel castings. It is due to his twenty-five years' experience that the new Bull Dog Stump Puller is a machine of such wonderful strength and workmanship.

Mr. A. Haase, secretary of the Mohr Steel Company, is an expert patternmaker. Patternmaking has been his life work, and his expert ability is responsible for the perfect mechanical design of the Bull Dog Stump Puller.

The necessary machine work on the Bull Dog Stump Puller is done under the supervision of Mr. B. H. Barber, a master mechanic. We also have an expert man on cables, blocks, and hooks. It is his duty to inspect all this equipment before it leaves our plant.

Our office and shipping departments are handled efficiently by Mr. J. M. Finlayson, treasurer of the Mohr Steel Company, and your orders and shipping instructions will receive his prompt and careful attention.

The entire corporation is under the experienced management of Mr. R. Mohr, Jr., president of the company. All your inquiries and orders will receive his personal attention—in fact the entire organization is at your disposal to help you solve the problem of removing your stumps. The Mohr Steel Company is not a one-man concern, but a combination of experts. We can give you the very highest of references as to our responsibility. Finally, we have built what we believe is the most modern, strongest and most easily operated stump-pulling machine in the world, the new Bull Dog Stump Puller.



Rough, barren land like this is the kind of land the Bull Dog Stump Puller can turn into a fertile field. Note the decaying vegetation. This is the reason that stump land is so rich when once cleared

STUMP LAND

R · MOHR · JR.

President Mohr Steel Company

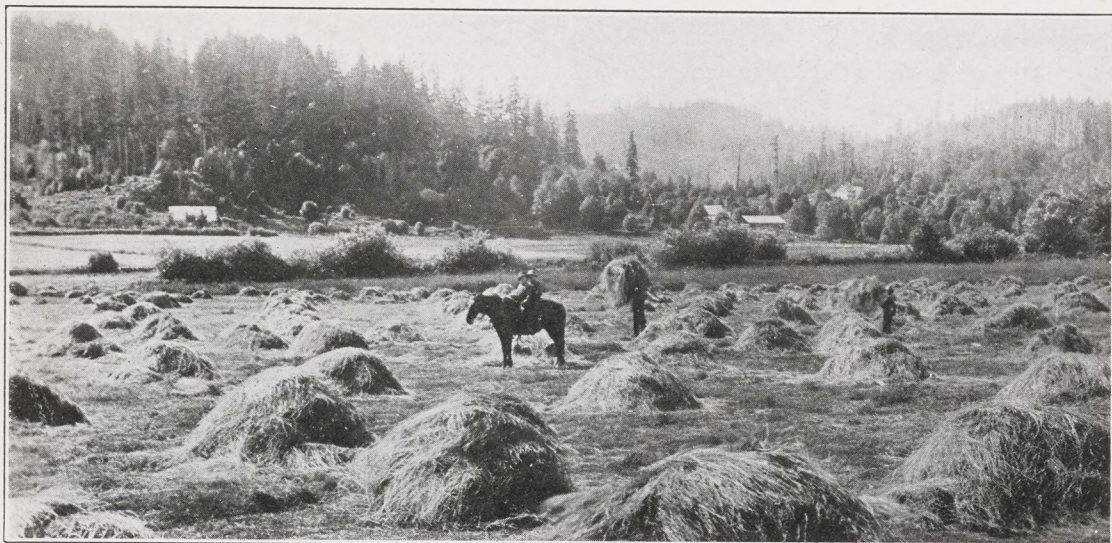
STUMP land is practically useless. If you own some and are not making ready to clear it you are losing valuable time, which means a loss of profit each year you wait. Just stop and think a minute. The soil where stumps are is rich in quality and as good as any soil in the country. The minute those stumps are out your land increases in value over night.

The Bull Dog Stump Puller not only pulls the stump, but takes all the roots out with it. After the stumps are removed you can farm your land with modern machinery, thereby getting larger crops and saving labor.

All our Bull Dog Stump Pullers are ready for work when they arrive on your land. The hand-power machine is ready for immediate use. The horse-power machine, however, is not shipped with the wood bed timbers and wood boom. That is because of the high freight cost. It is a simple matter, however, to make your boom and bed timbers from rough lumber or timber at hand. You do not need a blacksmith or any mechanic; just hook the machine to the stump and in a few minutes the stump is out, and your land

clear. The wise man buys stump land and clears it himself, thereby getting the benefit of the increased value. Without figuring the return of any crops, he has made money in the increased value of his land after clearing. There is no science or experience necessary to clear your land with our Bull Dog Stump Pullers; anybody can operate them. Remember, too, that after you clear your land you will still have the Bull Dog Stump Puller, which you will find very valuable and useful for many other jobs on the farm, such as hoisting boilers, moving buildings, clearing hedges, stretching wire fences, and even hauling tractors and other heavy machinery out of mud.

In this age, with modern tractors and other farm machinery, you don't have to depend entirely on hired labor. By these modern methods one man can farm a great many more acres in a scientific and profitable way, but this cannot be accomplished until you remove those stumps with the Bull Dog Stump Puller. Don't sit back and watch your stumps sprout, but get them out and watch your crops grow.



A valuable meadow bottom reclaimed from the surrounding forest. Thousands of such acres have been cleared by farmers. A Bull Dog Stump Puller will help you to do the same kind of work

CLEARING LAND

What the Government Reports Say

THE importance of clearing your stump land is strikingly shown by Mr. Earl D. Strait, Government expert on clearing land, who is connected with the U. S. Department of Agriculture. In his discussion of the subject he brings out the following points:

1. "On thousands of farms throughout the cut-over sections the most vital problem in normal times is how to get this unproductive land cleared so that it will bring in an increase of revenue.

2. "Stumps occupy valuable land; foster the growth of weeds, since in order to keep the land in their vicinity clean much hard labor is necessary; mar the appearance of otherwise smooth fields, and hence reduce the selling price of a farm; furnish shelter for harmful insects and animals; and prevent the efficient use of modern machinery.

3. "Most hardwoods decay so that they can easily be removed within ten years from the time of logging, provided the stumps are kept from sprouting. Most pine and fir stumps, on the other hand, are very resistant

to decay. Their main roots will remain sound a lifetime. The small roots of any stump will decay in a few years, and with them out of the way the cost of stumping is reduced."

The Government recommends the stump puller for clearing land. It says in Bulletin 974:

"Several ways have been suggested for lowering the acreage charge for use of the stump puller. Often one can sell a puller at a fair price when it is no longer needed. Several farmers might purchase one in partnership. Commercial clerks, township or county officials, interested in the development of cut-over lands could purchase such an outfit and rent it to those clearing land. Probably \$2.00 a day would be a fair charge. (Note: The Government is very conservative in its estimate of the rental value of machines. Prices have advanced in every way so much in the last few years that the prices paid today are considerably above this figure. Even the figure quoted, however, illustrates the profit that is sure to follow the intelligent use of such machines.)

The Government report continues:

"In pulling standing trees or in pulling stumps in locations where logs, tree tops or other obstacles would prevent the use of horse machines, the hand stump puller is very efficient. It also has the advantage over the horse-power puller in that it can be operated in almost any position, while the pull of the horse-power machine must be in nearly horizontal position, otherwise it is likely to be overturned. For that reason hand-power pullers can be operated on very steep land, and less time is required to set them up than to set up horse machines. It is easier to pull a standing tree than it is to pull the green stump of the same tree, as the cable hitch can be made high up on the trunk of the tree to give a more powerful leverage on the roots.

"As a general proposition, horse power is cheaper than man labor. Where a horse-power machine can be used, stumps can be pulled more cheaply by it than by the hand-power machine. Medium-sized machines are usually more satisfactory than large ones since the latter are cumbersome to handle and are expensive. In

stumping hilly land, set the horse-power machine as near the anchor stump as possible, and place the anchor cable in notches cut at the ground line of the anchor stump. By using the double- and triple-power arrangements of lines the horse-power machine will pull very large stumps."

Note the points that Mr. Strait brings out about "growth of weeds," the "reduction of the selling price of the land" and the "inability to use efficient modern machinery," all because of stumps. Cleared land will bring "an increase of revenue." Also the Government's statement that "the hand-power stump puller is very efficient" and "the horse-power machines will pull very large stumps." Points well worth thinking over.

No matter how old your stumps are each stump takes up about 10 square feet of tillable soil—ground that could produce a crop under better conditions. It is hard to cultivate around these stumps, and at best it is a disagreeable and expensive task. To keep paying taxes on stump land when it could be made to produce bumper crops is poor business. Just figure for yourself how much your stump land is costing you each year, and you will be in the market for a stump puller. When



A stump puller is good for trees as well as stumps. The Bull Dog is so light and so easy working that even a woman can use it with ease. Here it is shown pulling out dead trees in a fruit orchard

you do get a stump puller, you will want one that will do your work in the right way. That is the purpose of this catalog—to show you just how the Bull Dog

Stump Puller can help you to save the money that you ought to be saving. The Bull Dog is not an expense, but a profitable investment.



Crops where once a forest stood. Such land as this is virgin soil, and will more than repay you for any work in clearing it

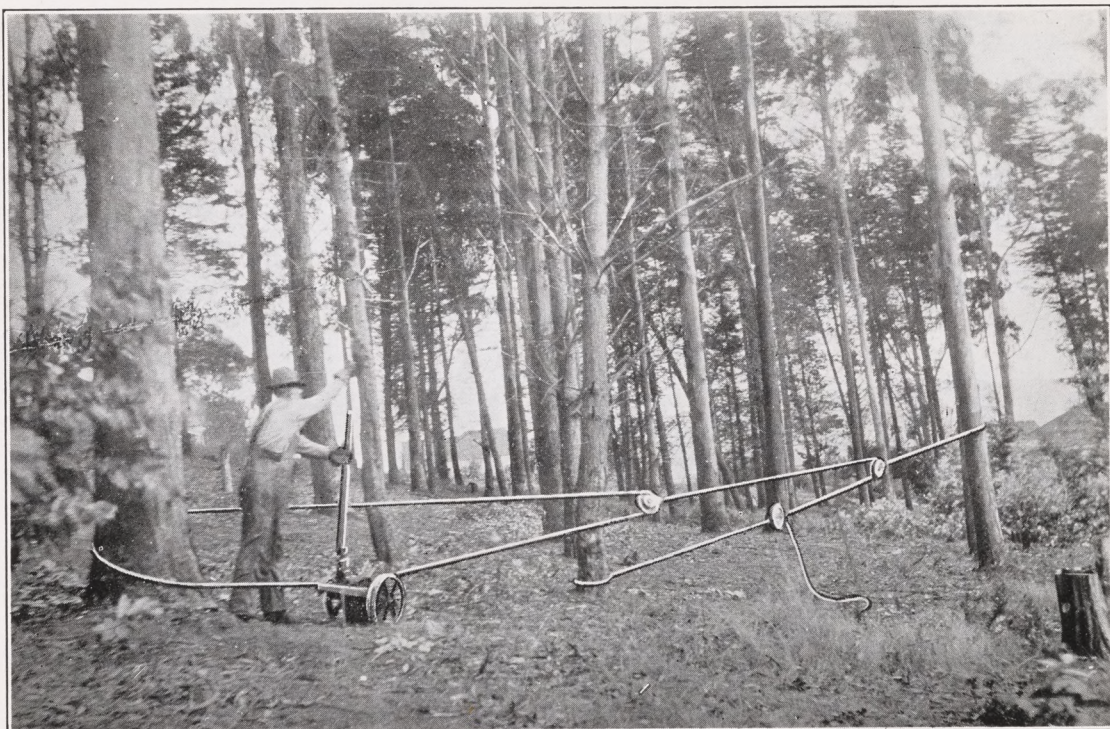
MAKE BIG PROFITS FROM YOUR STUMP LAND BY CLEARING IT WITH A BULL DOG

SUCH a crop as shown in the accompanying photograph is the reward in clearing up stump land. The soil, rich with a century's deposits of decayed vegetation, pays well for the labor.

It is of such land that the Government reports say: "There are great areas of good cut-over land lying idle—not even growing timber—that is worth more for crop than for timber production. On thousands of farms the most vital problem is how to get this unproductive land cleared so that it will bring in an increase of revenue. On many farms there are

tracts covered by stumps that are well adapted to crop production."

Every year you leave stumps in the ground you are losing money. Look at the picture again and think the proposition over. Possibly you have stump land today worth almost nothing. The country demands increased production. You would be glad to have an increase in your income. You can raise the most profitable crop of your lifetime if you will only take the trouble. Stump land is virgin soil. It will net you a big return when put to productive purposes.



Showing the Bull Dog Stump Puller hitched up for a 60-ton pull. By using two blocks, this small, light machine is able to pull as large trees as any machine on the market, and we believe faster and with less work for the man using the machine

HOW THE BULL DOG STUMP PULLER WILL PAY FOR ITSELF

THE Bull Dog Stump Puller soon pays for itself simply by the increase in land value. Where stump land is worth \$25.00 and cleared land \$100.00—and this is generally the relative value of the two—the difference between the two prices is usually enough to more than pay for the original expenditure. But this is but one of the ways in which this valuable machine makes itself worth while. Consider for a minute the following facts:

1. Stump land, when cleared, is exceptionally rich land. Previous crops have had no chance to wear it out, and the decaying vegetation of years has made it exceedingly productive. You yourself know the rich leaf mold that has accumulated in your stump land. Clear this land and you put yourself in line for the biggest crop you have had in years. Generally your profit the first year will net you

enough to pay several times the purchase price of a Bull Dog Stump Puller.

2. If you are clearing timber lands, the saw logs will be a big item in your profit. Stove wood, from the smaller trees, will come in mighty handy around the house, or it may be readily sold.

3. Where roots and all are removed, you can use up-to-date machinery for cultivating and harvesting. Perhaps you have seen the time when a plow, broken on some concealed root, has cost you time and money. Get away from that danger. And remember that dynamite or improperly designed stump pullers leave these roots in the ground to annoy you at some future date. The safe way is to get a Bull Dog Stump Puller to do the work thoroughly.

4. If you have the time, contract to clear your neighbor's land. If you are



A giant fir, and yet hardly a root broken. The machine perched on the stump gives some idea of the size of the roots pulled out

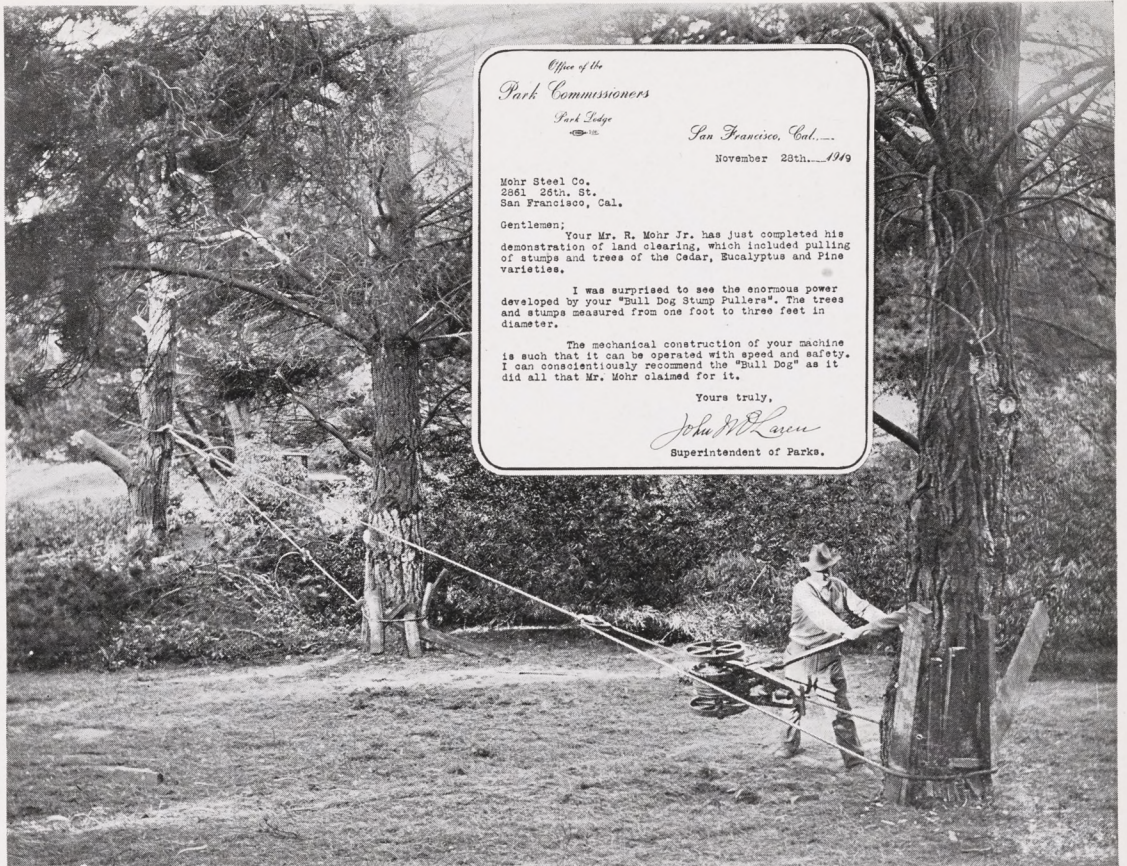
busy, rent the machine to him. Either way will net you a good profit. With a Bull Dog you can not only clear land, but hoist boilers, move houses or do similar work. And when you have put your stump land on a paying basis, there will be plenty of other farmers willing to profit by your example and buy your machine from you at a worth-while price.

These are some of the ways in which a Bull Dog Stump Puller is sure to pay you. They are well worth considering. A little figuring will show you actually how much money you are losing. On unproductive land you pay taxes while getting no return. On cleared land you are assured of a constant profit. When you come to sell, it is your cleared land that will determine how much you obtain for your farm. The Bull Dog Stump Puller is not an extravagance. It is a good busi-

ness investment from which you will receive a handsome profit.

No Extras to Pay for When You Buy a Bull Dog

Every Bull Dog Stump Puller is shipped to you complete and ready to use. The purchase price includes every bit of equipment that you may need. One of the special features of the Bull Dog is the root hook that we furnish *free* with every machine. Stumps and roots cannot be successfully removed without a root hook being used. Remember that a buried root may break a plow or harrow and cost you a lot of money later on. As far as we know, other manufacturers charge extra for a root hook, and yet it is a very important part of every outfit. Just keep this point in mind. When you buy a Bull Dog it is ready to be put to work.



*Office of the
Park Commissioners
Park Lodge
San Francisco, Cal.
November 28th. 1919*

Mohr Steel Co.
2861 26th. St.
San Francisco, Cal.

Gentlemen;
Your Mr. R. Mohr Jr. has just completed his demonstration of land clearing, which included pulling of stumps and trees of the Cedar, Eucalyptus and Pine varieties.

I was surprised to see the enormous power developed by your "Bull Dog Stump Pullers". The trees and stumps measured from one foot to three feet in diameter.

The mechanical construction of your machine is such that it can be operated with speed and safety. I can conscientiously recommend the "Bull Dog" as it did all that Mr. Mohr claimed for it.

Yours truly,
John W. McLaren
Superintendent of Parks.

The Bull Dog Stump Puller working in Golden Gate Park. The letter from Mr. McLaren, superintendent of the park, tells with what wonderful success the Bull Dog tackled these ancient giants

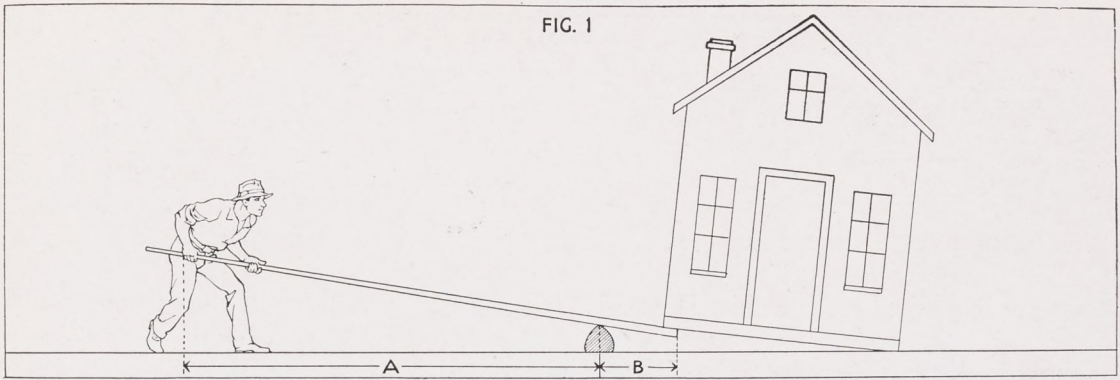
WHAT THE BULL DOG DID IN GOLDEN GATE PARK SAN FRANCISCO

READ what the superintendent of Golden Gate Park has to say about the wonderful work of Bull Dog Stump Pullers. Golden Gate Park, San Francisco, is one of the largest city parks in the United States, being about five miles long. It is covered with a wealth of large old trees. In the course of time these trees have become too thick and some of them are being removed. Mr. John W. McLaren, the superintendent, offered the Bull Dog Hand-Power Machine a chance to show what it could do to these monsters. The above picture shows the process of pulling. You will note that the limbs are cut off the tree being pulled so that the trees around it will not be in-

jured. The trees being used as anchor stumps are protected from the pressure of the anchor cables by planks.

Mr. McLaren's letter speaks for itself. He was surprised at the power of the Bull Dog machine—just as many other people have been. But besides being strong, he saw that the Bull Dog was simple and easy of operation. If you have any big trees like those in Golden Gate Park, the Bull Dog will rip them out in a hurry. It's built for work—work of the hardest and roughest kind.

Read over the catalog carefully, decide whether you need a hand-power machine or a horse-power machine, and then order a Bull Dog.



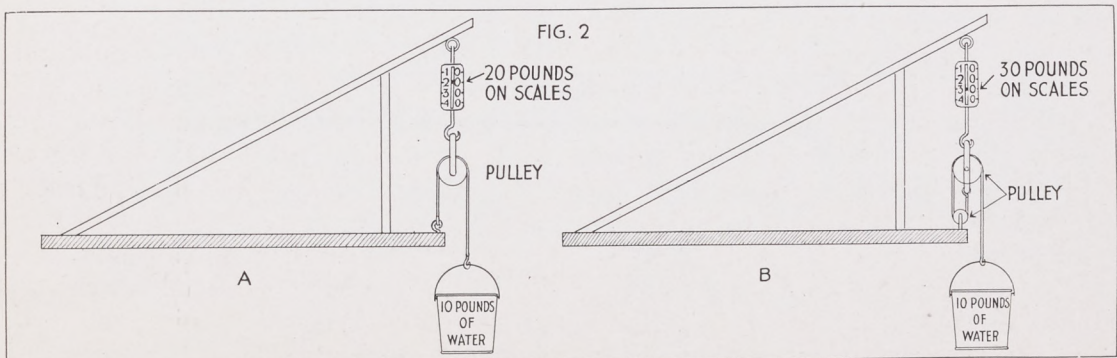
HOW THE BULL DOG GETS ITS POWER

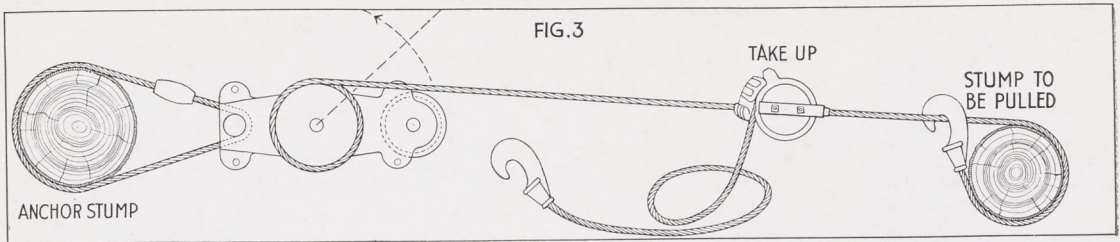
THAT any stump puller can exert enough pressure to tear out big stumps seems a wonderful thing. Yet the principle upon which it works is a simple one, and has been used since the beginning of the world. It is the principle of leverage. Here is the idea without any frills. You run a crowbar over a block and under a stone and you have no trouble in moving the stone. Or, if you have a lever long enough you could move a house, as illustrated in Figure 1. The distance from your end of the crowbar to the block is, let us say, 100 inches; from the block to the house 1 inch. The leverage ratio here is 100 to 1, and the pressure you exert at your end of the bar is multiplied a hundred times by the use of this lever. The principle is the same one used in an automobile jack, where you are able to lift many times your own weight. So in the stump puller. Your strength in the hand-power machine, or the strength of a team of horses on the end of the long sweep of the horse-power machine will

exert a tremendous leverage at the drum where the cable winds around it. The power which can be applied is almost limitless. In fact the main feature which governs the maximum possible power is the size of the drum cable which can be most easily handled. Generally a $\frac{7}{8}$ -inch cable has been found the most successful. A $\frac{7}{8}$ -inch Bull Dog cable will stand a 35-ton pull, but we only figure it at 30 tons, as it is not advisable to work a cable up to its full breaking strength.

Look for a minute at the diagrams below. The pail of water shown in Figure 2 weighs 10 pounds, and if suspended by a straight rope from the scale would show that weight. By the use of one pulley the pull on the scales becomes 20 pounds, although the strain on any one part of the rope is still only 10 pounds. The same is true when we introduce another pulley. The scale registers 30 pounds, but the strain on the rope is still only 10 pounds.

As can be seen, there is no trouble at all in producing a 30-ton pull on the



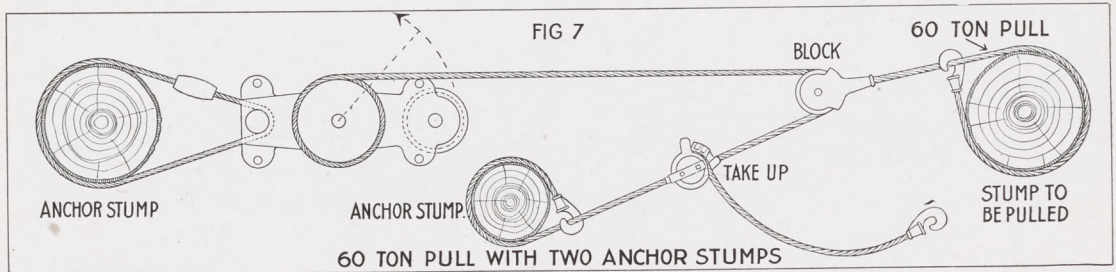


drum cable of the horse machine, but this power will not pull all of your stumps. It must be increased to 60 tons, 90 tons, and possibly 120 tons—a comparatively simple matter when we employ another law of mechanics.

It is by the use of such pulleys, or blocks, as they are more often called, that our steel cable can exert such tremendous pulling power. The horse machine

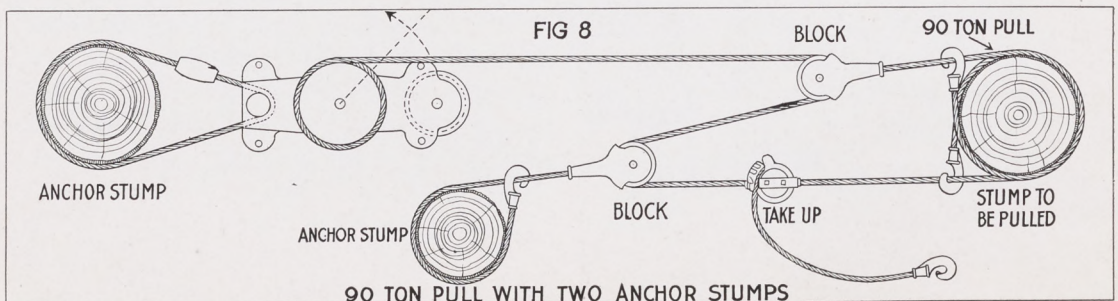
pressure of 120 tons on the stump. Another way to accomplish this same thing is to use a longer handle or sweep, increasing the force exerted at the drum, and to use a larger cable. But all things considered, this is a less satisfactory method of operation, as a thicker cable is much heavier and harder to handle.

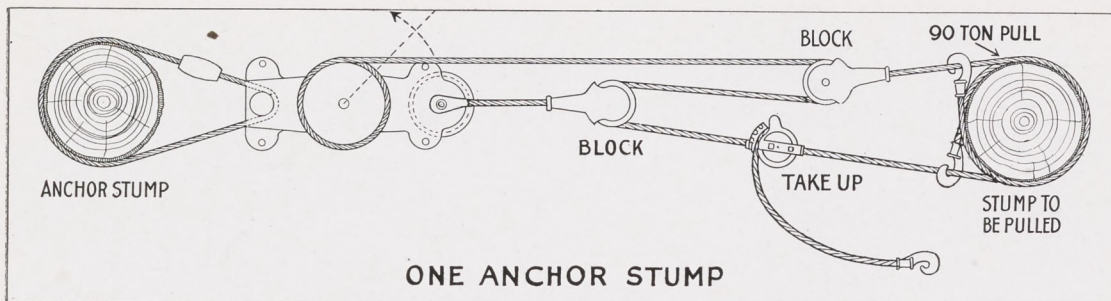
In the following illustrations, Figures 7 and 8, we have figured on using two



pulling directly can pull 30 tons (see Figure 3), as in Figure 7, and while the strain is still only 30 tons on any one part, yet the resulting pull on the block, and thus on the stump, is 60 tons—just twice the original force on the drum. When we introduce a second pulley, as shown below (Fig. 8), we get a pull of 90 tons on our stump, although the cable itself is subjected to a strain of only 30 tons. In the same manner a third pulley can be used, in which case we exert a

anchor stumps. Only one is necessary, however, if two are not available. The cable fastened to the second anchor stump can be carried back and attached direct to end of machine, as shown at top of next page. In either case, however, the principle of increased power remains the same. One pulley doubles the power, two pulleys triple it, and three pulleys make it four times as great upon the object to be moved. No stump is too tough for a Bull Dog Stump Puller, after you have used one you'll agree.





ANCHOR STUMPS

SOME classes of machines use one anchor stump, while others employ two, as shown in Figures 7 and 8 on the opposite page. When only one anchor stump is used, simply attach the cable to the end of the machine, as shown in the figure above. This idea permits you to pull stumps close to your machine or 150

to 200 feet away from it. This is a real time saver.

Under some conditions the one anchor stump method is best, while under other conditions the two anchor stump method is preferable. The Bull Dog is a combination machine—you can use it for whichever method is handiest and quickest.



A. F. EILENBERGER RABBITS

NEW ZEALAND REDS · FLEMISH · BELGIANS
HEALTHY, VIGOROUS STOCK

EDEN, N. Y.

Nov. 20, 1919.

Mohr Steel Co.,
San Francisco, Calif.
Gentlemen:

Your Bull Dog 90 ton machine is certainly the stuff on hard work and especially if you have lots of it to do. You get best results on large, tough stumps when the ground is moist. I like everything about the whole outfit and can make no suggestions. Pictures did not turn out good, but will send some later.

Yours truly,

A. F. Eilenberger.



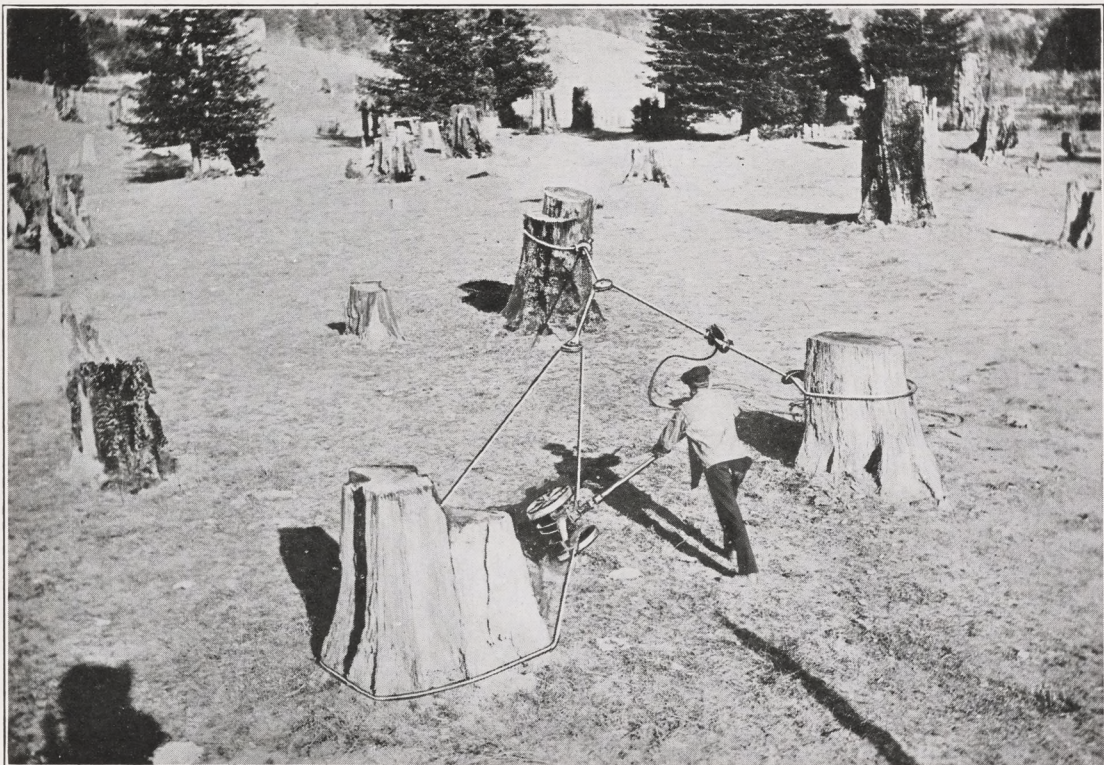
It took twelve minutes to yank this monster out with a 90-ton hitch. Note that the roots were pulled out—not broken off, to later interfere with plowing. Compare the length of the roots with the height of Pete Wilson, standing on the stump

HOW THE BULL DOG PULLS STUMPS

IT is easy to see how the Bull Dog is able to pull out the stumps that it does. The pressure which can be exerted is unlimited. The whole test of a stump puller's power lies in the steel cable, and practical experience has shown that the $\frac{7}{8}$ -inch cable is by far the best. By the use of blocks with the horse machine, 30 tons pull can be increased to 60 or 90 tons, depending upon the number of blocks. With the hand-power machine the 15 tons initial power is increased to 30 or 60 tons by these same blocks. In the horse-

power the 30-ton pull on the drum line is increased to 90 tons on the stump.

The stumps you can pull depends on their condition. Generally, from ten to twelve minutes is enough on hard ones; half that time on easy ones. A day's work is from 25 to 150 stumps, although it is possible to pull 600. You soon learn a fair day's work under your own conditions. It depends upon the kind of stumps you have, and also on the condition of the soil. However, you'll find no trouble in "yanking" out any stump in quick time.



Getting 60 tons power with two blocks. Note the convenient position of the machine for work. Power is developed by moving the handle backward and forward, just as you would in rowing a boat

Mohr Steel Co.

Graton, Calif., November 13, 1919.

Dear Sirs:

Having handled large contracts by the acre in Oregon, Washington & California, I used over a half dozen different machines and know what a stump puller should be.

When it comes to developing enormous power without breaking your back, I recommend the Bull Dog hand power with which I have pulled large fir trees over 35 inches in diameter with roots in dry baked soil almost as hard as cement.

Your blocks, cable and all equipment are strictly first class and above all made so a fellow can work fast.

ED CAMPBELL

Mohr Steel Co.

Jacksonville, Florida, November 7, 1919.

Gentlemen:

I am using both your 60 ton Hand Power and 90 ton Horse Power on a large job of clearing and must say I am satisfied. I have pulled everything I have hitched to so far and some of the stumps had mighty large roots, one measuring over 31 feet long.

I don't know which I like the best but this job really needs both kinds of machines so I am pretty well fixed up.

Very truly yours, H. JENKINS.

Mohr Steel Company.

Medford, Oregon, Nov. 1, 1919.

Dear Sirs:

Pulling trees with your Bull Dog Hand Power machine is almost play. It will pull any tree that a man can climb. You simply hitch the cable around the tree ten or 15 feet above the ground depending on the size of the tree and then just pump the handle a few minutes and over comes the tree tearing up roots and all. It's a dandy machine for both stumps and trees.

Yours truly, W. A. WEBBER.

Mohr Steel Co.

Fulton, Ind., Nov. 5, 1919.

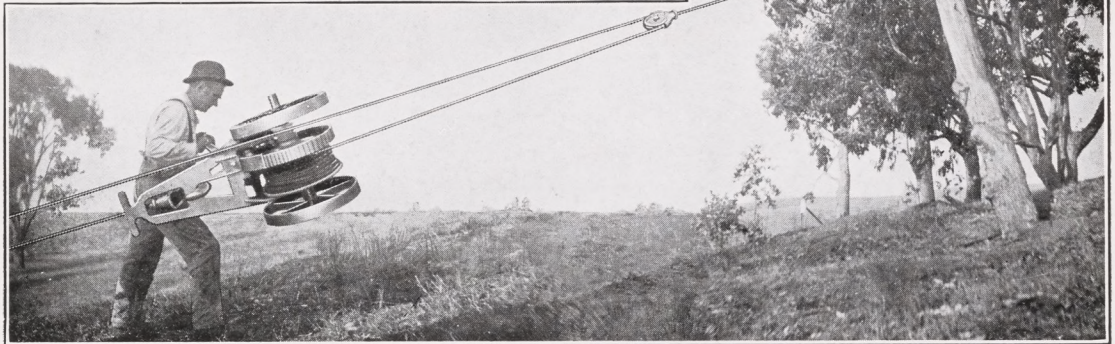
Gents:-

I am glad to say your 90 ton horse power puller will not only do what you claim but a great deal more.

It is stronger, handier and quicker than any other. It is both a whirlwind and a monster if you have real work to be done. Your cable is limber and certainly strong.

Yours truly, I. M. DIELMAN.

A tree on a hillside about ready to fall under the enormous pressure of a Bull Dog. Notice the distance the machine is from the ground. Under such conditions a hand-power machine is much better than a horse-power machine



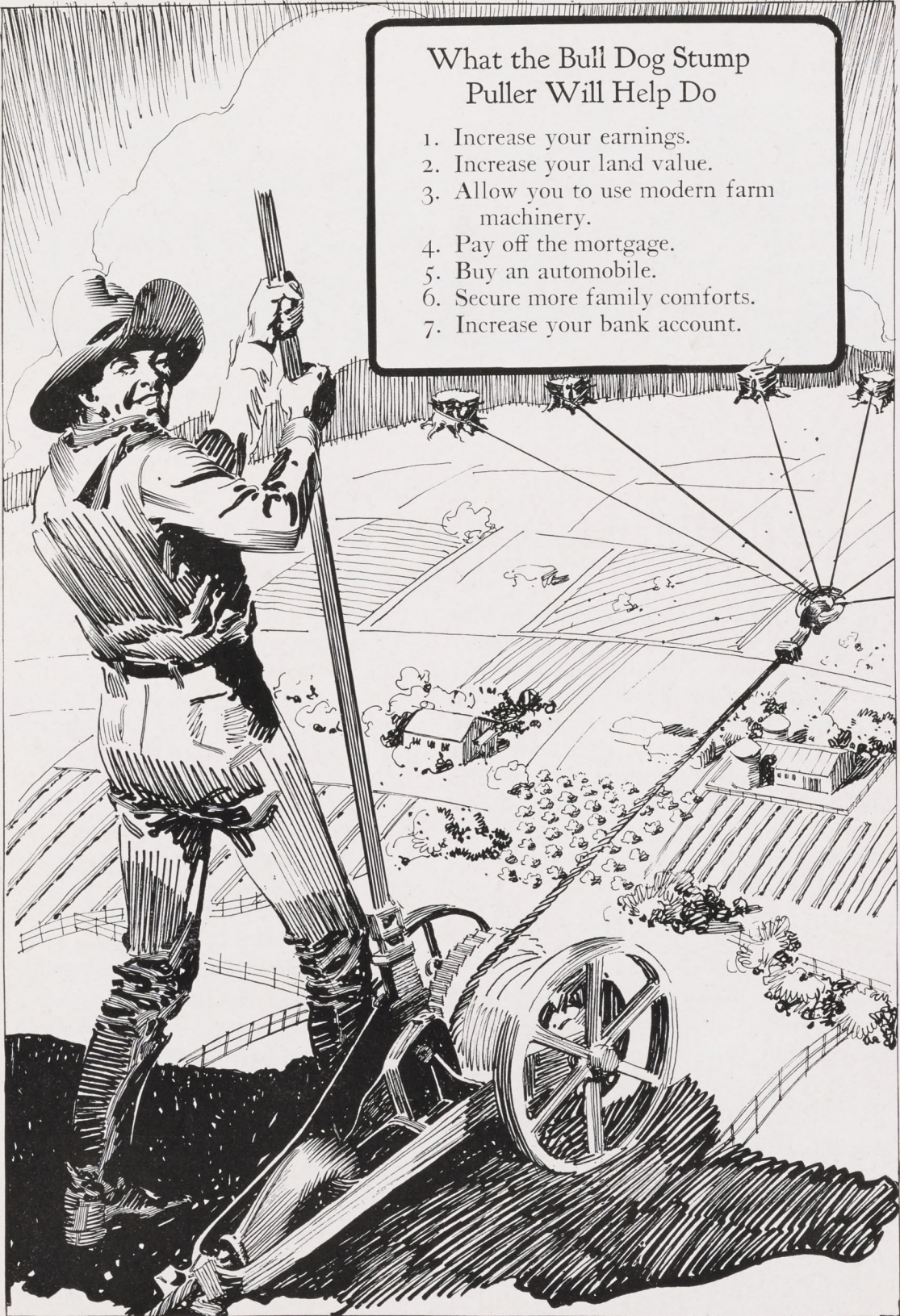
TACKLING TREES ON A HILLSIDE

THE above photograph shows the actual operation of the Bull Dog when it comes to tackling trees. There is a great advantage in pulling trees in this way, as a hitch high in the air gives the machine a tremendous leverage on the roots. This leverage, added to the power in the puller itself, is great enough to move the most deeply rooted trees that you come across.

As seen in the picture, the man working on the machine is using only one block, obtaining a pulling power of 30 tons. The cable is run from the drum through the pulley, then passed around the anchor stump, and is finally hitched to the machine. Notice for one thing the elimination of any extra anchor cable. Notice also the position of the cable itself. In such a situation you can see the impossibility of using a horse machine to any advantage. The horses would have difficult work in getting over the cable each time they came round with the boom. It is because of such situations as this that we have both Bull Dog Hand-Power and Horse-Power Machines. As

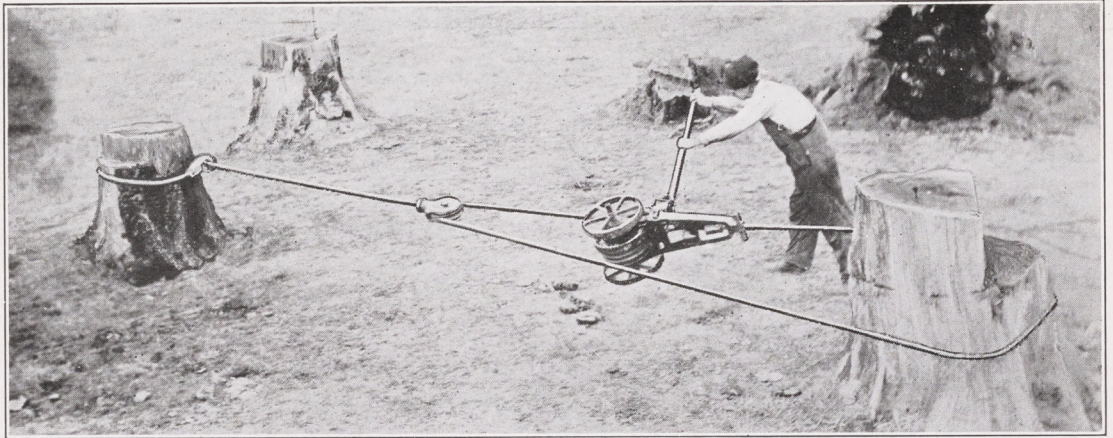
we have said time and again, there are some cases where you will need a hand-power machine and there are other cases where a horse-power machine will better fill your needs. We have given the situations under which each type is most effective. We want you to consider them carefully and get the right kind of a machine. And if at any time after you have bought a machine, either hand-power or horse-power, you don't feel that you have the right machine for your purpose, we want you to write in and take advantage of our exchange policy, as explained elsewhere in this catalog.

We will be glad to exchange your machine, giving you a horse-power machine for a hand-power, or the other way around. We will make this exchange on a fair basis that will not make you lose any money. You might need a horse-power machine now, and later on you might move to another place where a hand machine would be better. Tell us about it, and remember a satisfied customer means more to us than a sale. You will have no regrets if you buy a Bull Dog.



What the Bull Dog Stump Puller Will Help Do

1. Increase your earnings.
2. Increase your land value.
3. Allow you to use modern farm machinery.
4. Pay off the mortgage.
5. Buy an automobile.
6. Secure more family comforts.
7. Increase your bank account.



Notice the single block being used on this redwood stump. One block develops 30 tons. When more power is required, a triple hitch with two blocks is used—see page 8, also page 26, in which you get a 60-ton pull

BULL DOG HAND-OR HORSE-POWER MACHINE— *Which Type Fits Your Needs?*

BOTH a Bull Dog Hand-Power Machine and a Bull Dog Horse-Power Machine are built by our company. We have done this because there are some instances in which a hand-power machine is particularly useful, others where a horse-power machine is better. It all depends upon the conditions which you have to meet. Our aim is to supply you with a machine that will do your work quickly and efficiently.

When You Need a Hand-Power Machine

There are some cases when the Bull Dog Hand-Power Machine is particularly valuable. Briefly stated these are:

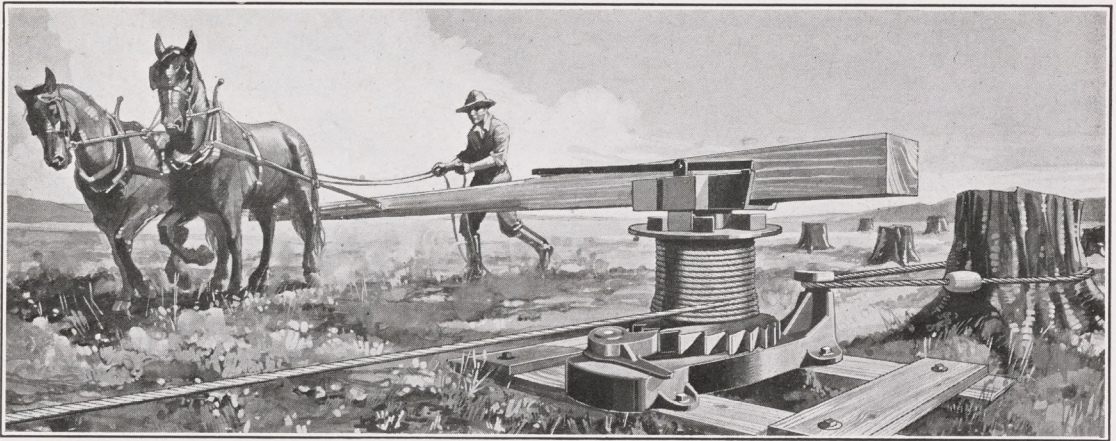
1. When pulling trees. The chances are that your cable will be fastened to the tree at a considerable distance above the ground to give leverage. In this case it would be difficult to use a horse machine because the horses could not walk over the cable. Government Bulletin No. 974, issued by the U. S. Department of Agriculture, states: "In pulling standing trees or in pulling stumps in locations where logs, tree tops or other obstacles would

prevent the use of horse machines, the hand-power stump puller is very efficient. It also has the advantage over the horse-power puller in that it can be operated in almost any position, while the pull of the horse-power machine must be nearly horizontal; otherwise, the machine is likely to be overturned. For that reason hand-power stump pullers can be operated on very steep land and less time is required to set them up than to set up horse machines."

2. When working on swampy land.
3. When tackling stumps on hilly land. The rising of the cable makes the operation of horses difficult.
4. When you intend to use your machine at odd moments the hand machine lends itself much more easily to rapid movement and quick setting up. The hand machine is ready for work whenever you have a little spare time.

When a Horse-Power Machine Is Best

On the other hand there are some types of work in which you will much prefer



The Bull Dog Horse-Power Machine

the horse machine. It is best adapted to the following conditions:

1. Where speed is required. There is no question but that the horse-power outfit, working day in and day out, will show much more progress than a hand machine.

2. Where you have a large acreage the horse-power machine will show a lower cost per stump. Continuing in the Government Bulletin No. 974, we read: "As a general proposition, horse power is cheaper than man labor. Where a horse-power machine can be used, stumps can be pulled more cheaply by it than by the hand-power machine. Medium-sized machines are usually more satisfactory than large ones, since the latter are cumbersome to handle and are expensive. By using the double and triple power arrangements of lines, the horse-power machine will pull very large stumps."

3. Where the land is level and there are a number of large stumps to be pulled.

4. Where a team of horses can be spared to work it.

It is because of the fact that one machine is often more suitable than the other that we are making both hand- and horse-power outfits. There is no difference in the pulling power of a 60-ton hand machine or a 60-ton horse-driven puller. They both pull exactly the same size stump. On hilly, rough or swampy

ground the hand power is the quicker; on comparatively level ground the horse-driven machine is faster. To do work with the wrong type of machine means wasted effort and wasted time. You will be most thoroughly satisfied if you consider your particular problem carefully before making a selection. Consult with us if you care to, and then go ahead and get the machine suited to your own stump land. You are welcome to write to us for information without obligating yourself in any way. Tell us what kind of problem you are up against and we will be glad to advise you as to the proper type of Bull Dog Stump Puller for you to buy.

Four Standard Models

There are four standard Bull Dog models. The hand-power machines are built to develop either 30 or 60 tons pull; the horse-power machines are built for either 60 or 90 tons pull. Besides these there are two special models, developing 120 and 150 tons, but we have concentrated our efforts on the four types first mentioned. With them you can do any work that would normally come your way. Our recommendation is that you choose either the 60-ton hand machine or the 90-ton horse machine, depending upon what type is fitted to your needs. Of course we will sell you any of the other machines, if they are what you want; but we believe that in the 60-ton hand-power machine and the 90-ton horse-power machine you will find the greatest satisfaction for all ordinary

conditions. If your land is hilly, or your work will be mostly on trees, the 60-ton hand machine will meet every ordinary need, giving you power and flexibility at the same time. If you have level, thickly timbered land, the 90-ton horse-power machine will "yank" out your stumps with little effort. It will enable you to go

after the big stumps with long tap roots, and it will be a machine that will last you as long as you have a single stump on your land.

On the following pages you will find additional information on the hand-power and horse-power types which may help you in your decision.

THE BULL DOG EXCHANGE POLICY

TO make doubly sure that you get a machine suited to your needs, the Mohr Steel Company has adopted an "exchange policy," something entirely new in the stump-puller field. Suppose you purchase a hand-power machine and later decide that you could do better work with a horse-power outfit. You may move to a new location where conditions are different. To take care of cases like this we have instituted our Exchange Plan. If you want to exchange the machine you have for a different type, write us. Our Exchange Plan is fair and square and will enable you to make the exchange without loss.

We are willing to do this in order that every purchaser of a Bull Dog Stump Puller may be perfectly satisfied. Of course we are anxious to make sales now, but we are even more anxious to build up good-will among the farmers. We have a good stump puller. We want you to know about it. More than that, we want you to be satisfied in every way with its performance. One satisfied customer today means hundreds of customers in the future.

BULL DOG MACHINES ARE COMPLETE

WHEN you buy a Bull Dog Stump Puller it is completely equipped and ready to be put to work. You don't discover that something is short and then have to write in to us and buy an extra piece of equipment. We give you plenty of cable, the highest quality too, blocks, hooks, and pulleys enough

to make every hitch. We even give you a root hook, which is a very important item and one that other stump puller manufacturers do not give, as far as we know. Once you buy a Bull Dog you have a machine with every necessary piece of equipment; you can put it to work and "yank" out any stump.

THE HAND-POWER BULL DOG

30 Tons Power — 60 Tons Power

AS we have just seen, there are conditions under which each machine, horse and hand, has particular points of value. Your problem is to decide which machine is suited to your needs. Stated briefly, a hand-power machine will serve you to the best advantage under the following conditions:

1. Where the land is hilly, or where operation of a horse machine would be difficult because of logs, brush or swampy land.
2. Where a team of horses is not available for work on stumps.
3. Where help is scarce and you must do the work alone.
4. Where you wish to pull stumps in your spare time. The simplicity of the Bull Dog Stump Puller puts you in a position to turn your odd minutes into a direct profit.
5. Where you want to pull trees rather than stumps. With the hand-power machine you can make your hitches 10 or 15 feet above the ground, and secure a tremendous extra leverage.

If you are faced by these conditions the Bull Dog Hand-Power Stump Puller, either the 30-ton or 60-ton model, is the one you want.

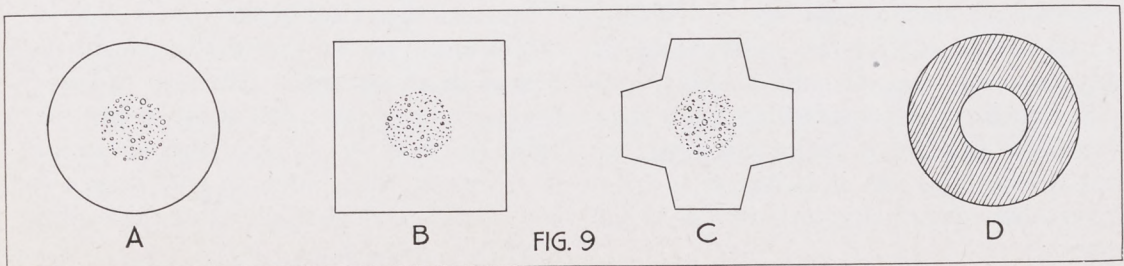
Why the Bull Dog Is a "New and Better Machine"

The men who are building Bull Dog Stump Pullers are experts. They have spent years in the business, building

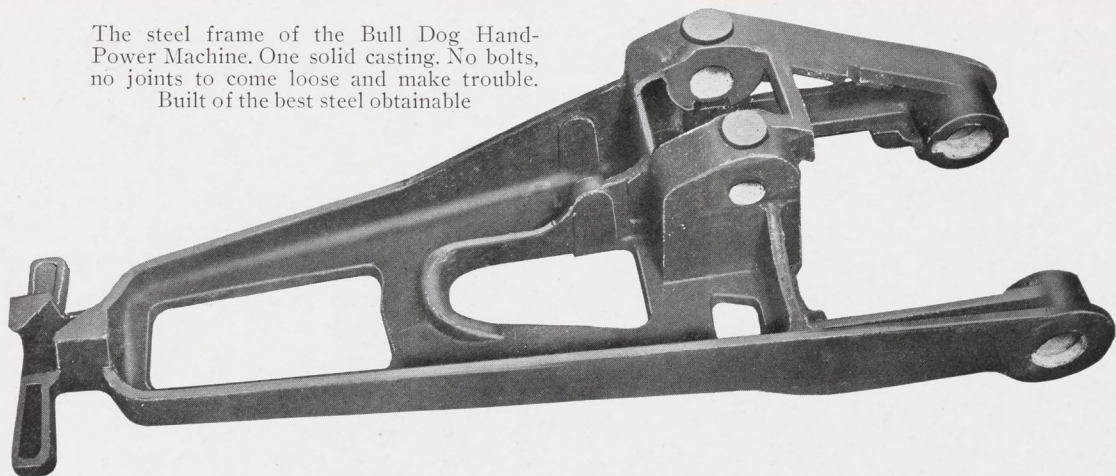
stump pullers for other manufacturers, and their experience and knowledge have taught them what the ideal stump puller should be. The Bull Dog Stump Puller is a new machine on the market, but we are proud of that fact. The good points of other stump pullers have been improved upon and built into the Bull Dog. The bad points have been carefully studied and avoided. The result, we believe, is that the Bull Dog is the finest, most modern and most practical stump puller on the market. It is an all-steel machine, guaranteed in every particular, fitted with every convenience, and built for the hardest use. It is built on the jack principle. When using a jack, you remember how your weight on the end of a lever was sufficient to raise a mighty big load. So in the Bull Dog. Your hundred pounds at the end of the handle is converted, through the power of leverage, into a force of 15 tons, and this 15 tons acts to turn the drum of the machine slowly around, thus winding up the steel cable. A few minutes of work on the handle tightens the cable, the stump begins to move, and then out it comes.

No Roots Left in the Ground

When you pull out a stump with a Bull Dog there is no need to worry about the roots, for they come too, leaving the soil free and clear for tilling. Roots left buried are liable to smash your plow or harrow when you start to till the soil. The Bull Dog has plenty of power, not only enough to "yank" out the stump, but also to pull the most stubborn roots.



The steel frame of the Bull Dog Hand-Power Machine. One solid casting. No bolts, no joints to come loose and make trouble.
Built of the best steel obtainable



RIGID TUBULAR CONSTRUCTION

THE Bull Dog is the only stump puller made employing cast steel of *tubular construction*. All others, as far as we know, are solid castings. Now it is a known fact, partly because of the experiences of metal workers in the war just past, that solid construction can never have the strength of a similar weight of steel with a hollow center. For the center itself is usually porous metal of little or no resistance. Look at Figure 9 on the previous page. Figures A, B and C show the solid construction design. Notice how the centers are porous and weak. Figure D shows the hollow design, or tubular construction. This is the method used in making Bull Dog Stump Pullers. By moving the center of our casting to the outside, we get solid steel of great strength with less weight.

Every part of the Bull Dog is built with a view to adding strength. No expense has been spared to make the Bull Dog the best stump puller on the market. Both the frame of the Bull Dog and all blocks, hooks and take-ups are constructed on the hollow, or reinforced, principle. Not only are they stronger, but much easier on your cable—the life of which is greatly increased by the elimination of all sharp or irregular edges. This construction costs us considerably more than the older method of solid construction, but in the long run it is bound to be a great convenience and a great saver of money.

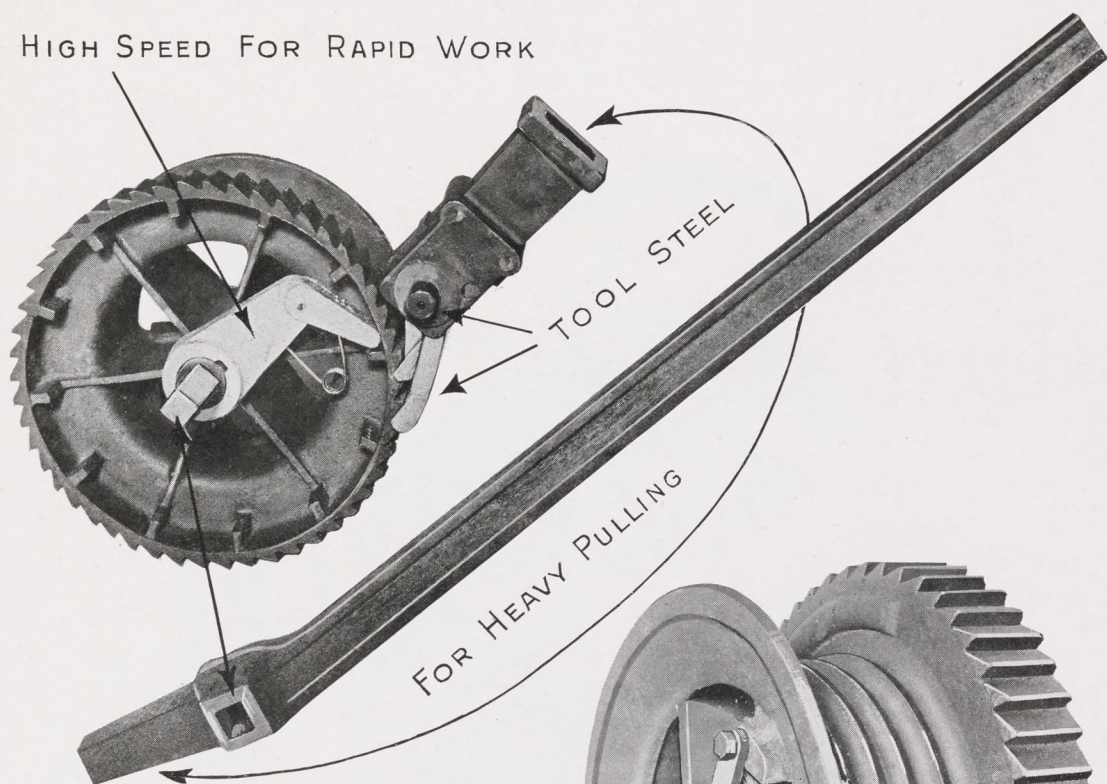
Frame One Solid Casting

The frame of the Bull Dog Stump Puller shown above is a one-piece casting. There are no joints, no bolts or nuts to work loose. These one-piece frames are really wonderful. They cost more to make, but they are stronger and lighter, and they cost you no more in the end. Our facilities for turning out such complicated designs permit a low cost and give a finished article that cannot be improved upon. Every frame is tested—first the material is analyzed by our chemist, and then the finished product is thoroughly tested. Not a single piece is passed unless it tests up to a very rigid standard and is subjected to a much greater strain than it will ever receive when the finished machine is put to work removing your stumps.

Unbreakable Bull Dog Axle

The axle on which the steel drum revolves is made of nickel steel, absolutely unbreakable; on account of the tremendous strain which comes on the axle this is very necessary. The drum itself is of cast steel, with specially hardened teeth. The steel drum cable fits into a slot in this drum in such a way that it can be removed in an instant if you wish to leave the machine outside, but want to put the cable under cover. Look at the picture of the drum opposite, and see how simple it is to attach or remove the cable easily and quickly.

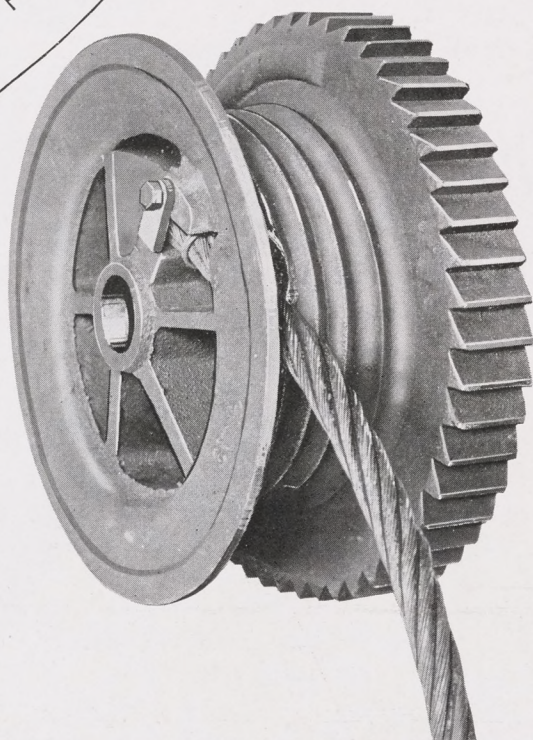
HIGH SPEED FOR RAPID WORK



The hand-power machine. Notice the simplicity of construction. Also its small size for the tremendous power developed. The lower picture shows the all-steel drum, around which the cable winds

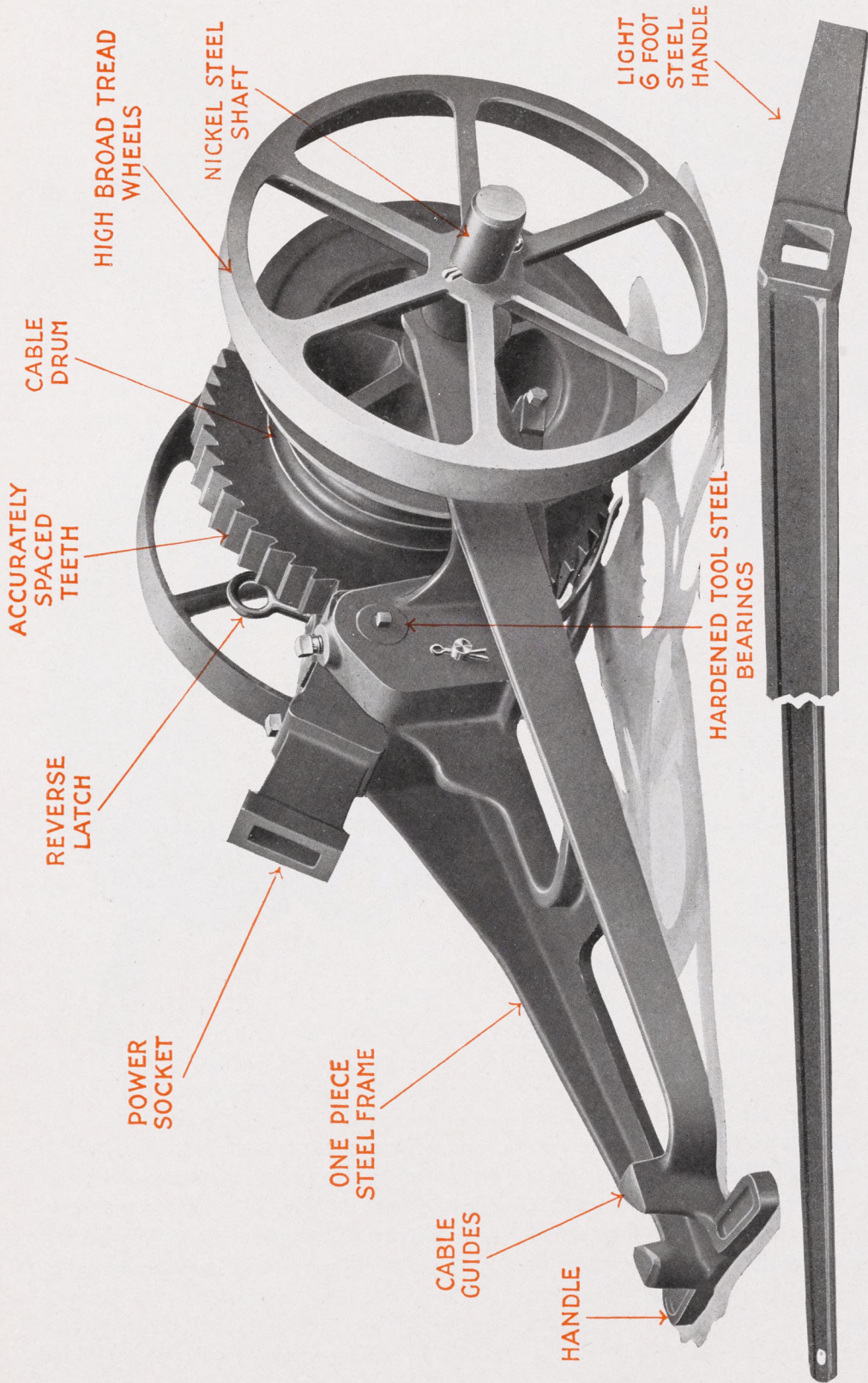
Special Two-Speed Feature

Speed is another important consideration in a stump puller. The Bull Dog is fitted with a two-speed feature. The first few turns of the drum tighten the cable. For this work the handle fits snugly on the axle, connected directly with the drum. No extra power is developed, but the cable is quickly drawn in. Then the end of the handle is changed to the socket (see above) and the work of removing the stump goes on. Nor is there any danger of the drum becoming disengaged. The teeth on the drum, seen in the accompanying photographs, are all especially hardened and will resist the strongest pull. The drum is at all times held from slipping by automatic safety dogs engaging it. If it is desired to slack up the tension or relieve it entirely, you move a small reverse latch and then work the



The Bull Dog tough steel drum

handle in the same way that you would on a direct pull, and the drum moves back one tooth at a time. This feature is very desirable in pulling trees or setting heavy machinery. When working on a tree you are in a position to select a new anchor stump if your pulling cable becomes too short. If raising heavy machinery, such as a boiler over a brick setting, you can slowly lower it until it is located on the spot which you wish it to occupy.



THE BULL DOG HAND-POWER MACHINE

GEO. A. GIBBS

ROCK, GRAVEL AND SAND HAULING
EUCALYPTUS AND CYPRESS WOOD

Mohr Steel Co.,
San Francisco.
Gentlemen:

San Francisco, Nov. 20, 1919.

For years I have pulled stumps by contract receiving from \$3.00 to \$6.00 per stump depending on size and conditions. Have used various makes of pullers and now have a Bull Dog Horse Power machine in clearing a subdivision of this city. Most of the stumps are eucalyptus with both long tap and lateral roots and I consider them the toughest I have ever pulled in my long years of experience. From my knowledge of various pullers I do not hesitate to strongly recommend the Bull Dog for certainly it delivers the goods.

Yours truly,
GEORGE A. GIBBS.

PALMER & McBRYDE
508 MARKET STREET
SAN FRANCISCO

Mohr Steel Company,
San Francisco, California.
Gentlemen:

Nov. 24, 1919

In answer to your inquiry as to the results we have had with your Bull Dog Stump Puller, beg to advise we bought this for use on our road work in Del Norte County where we are building a Highway through the heavy redwood timber. Due to the rocky character of the country it is impossible to use a heavy machine, and we have found your machine very satisfactory in every way. We use it for pulling trees, stumps, and removing windfalls and old logs. The day the stump puller arrived on the work our steam shovel upset and we saved the price of the stump puller in righting this shovel, and we found it a very handy tool to have on the work.

Very truly yours,
PALMER & McBRYDE,
by H. PALMER.

FOUNDRY EQUIPMENT CO.

DESIGNERS AND MANUFACTURERS OF

FOUNDRY EQUIPMENT

373 HERTEL AVE. BUFFALO, N. Y.

Mohr Steel Co.,
San Francisco, Calif.
Gentlemen:

Nov. 4, 1919.

We find your puller very handy in moving heavy machinery. On our work a straight line pull answers in most cases but have double the power by using the extra pulley on some very large jobs. The other day we also pulled a freight car back on the track and the work attracted the attention of a large crowd.

Yours truly,
FOUNDRY EQUIPMENT CO.



It is hard to believe, but the Bull Dog Hand-Power Machine, weighing only 175 pounds, pulled this sturdy oak, four feet in diameter, in twelve minutes. John Southers, who is shown in this picture, says that he can pull even larger ones

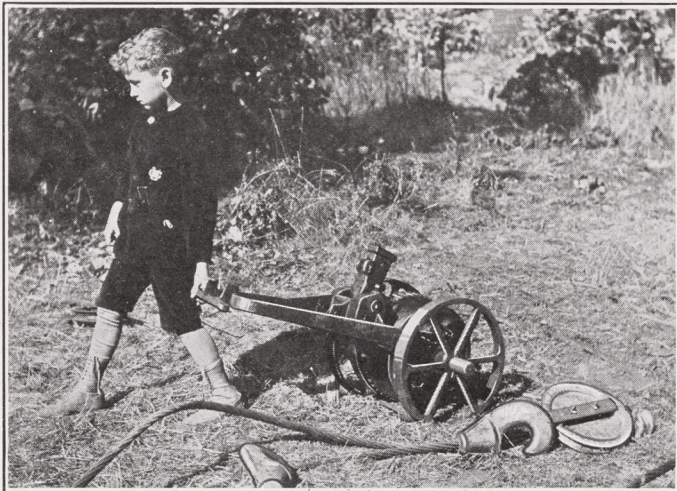


Mr. C. N. Sinks, who lives near Butte, Montana, is shown here stumping forty acres that should have been done years ago. He says that if he had removed them then, he would have had his mortgage paid off today



The above shows the Bull Dog Hand-Power Machine developing 60 tons by means of two pulleys. Study this hitch if you want enormous power. Find the man operating the machine and you can judge the size of the trees which he pulled

Another view, giving an idea of the enormous-sized roots the Bull Dog can pull



Even a boy of six can move the Bull Dog, so light is it, and so easy to move with its long handle and high wheels



Over rough ground it is an easy matter for a man to carry it on his shoulder. It weighs only 175 pounds

No Lost Motion

The Bull Dog is so constructed that lost motion is practically eliminated, and with the hardest pulling you can work the machine without walking back and forth at each stroke. You stand in your tracks and pump the lever backward and forward in a four-foot stroke, like rowing a boat. Tests have shown this to be impossible with other makes of hand machines. The teeth on the cable drum are even and accurately spaced, making every stroke equal. The pawls which engage these teeth and move the drum around, inch by inch, are firmly held by double-ended bearings in the handle socket, which in turn is firmly secured by trunnions on each side, fitted into hardened bearings which do not become worn. The long handle engages this socket with its wedge-shaped end and eliminates every possibility of lost motion.

Exceptionally Light Machine

Another improvement on the Bull Dog Hand-Power Machine is its light weight. Its total weight is only 175 pounds. The wheels on which the machine runs are exceptionally high—16 inches. This makes it possible to take the Bull Dog anywhere. The high wheels make possible a clear-

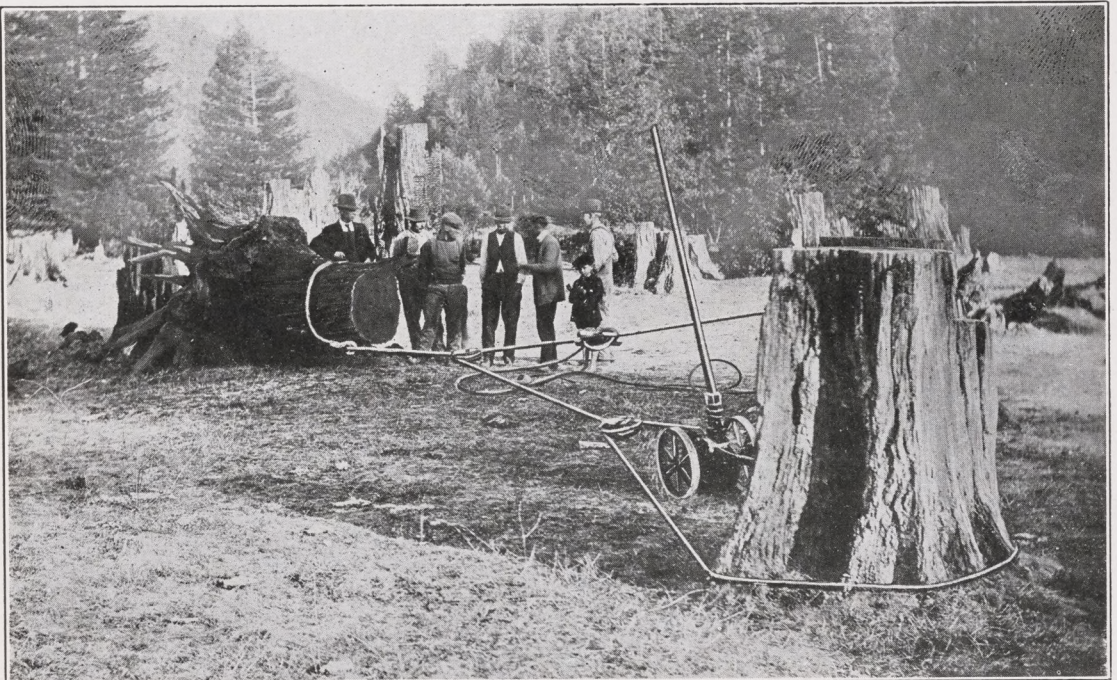
ance over bumps, logs and stones, and a child of six can draw it easily. The picture on this page is an actual photograph of such an occurrence. If on very rough land or among logs it becomes necessary to carry the machine, one man can take it on his shoulder. The machine is fitted with a long handle for pulling or pushing, as seen in the picture, an added convenience in handling it when much moving is to be done. The Bull Dog is the best machine for you to buy because of the careful designing of master craftsmen and the work of skilled labor, and because of the honest intent of the men at the head of the company. If a hand-power machine is the machine most suited to your needs, you will make no mistake in buying a Bull Dog.

Guarantee Protects You

Last of all, don't forget to read carefully the three-year absolute guarantee under which every Bull Dog Stump Puller is sold. A guarantee made out in the name of the purchaser goes with every order. If the Bull Dog is not exactly as we represent it we will take it back and refund your money. However, a guarantee with a Bull Dog is really unnecessary. It is designed and built to do much more than we claim for it, and there is no doubt about its satisfactory performance.



This 32-inch pine tree was pulled clear of the ground by a Bull Dog Hand-Power Machine. The 18-year-old lad in the picture operated the machine. The power pulley and cable were attached about eight feet above the ground



The Bull Dog wins a bet. The apple grower in white shirt sleeves bet \$10 that the Bull Dog couldn't pull the 36-inch redwood stump seen in the picture. He lost, although other makes of hand-power machines had already failed to move it. As in many other cases, the Bull Dog showed its superiority over its competitors

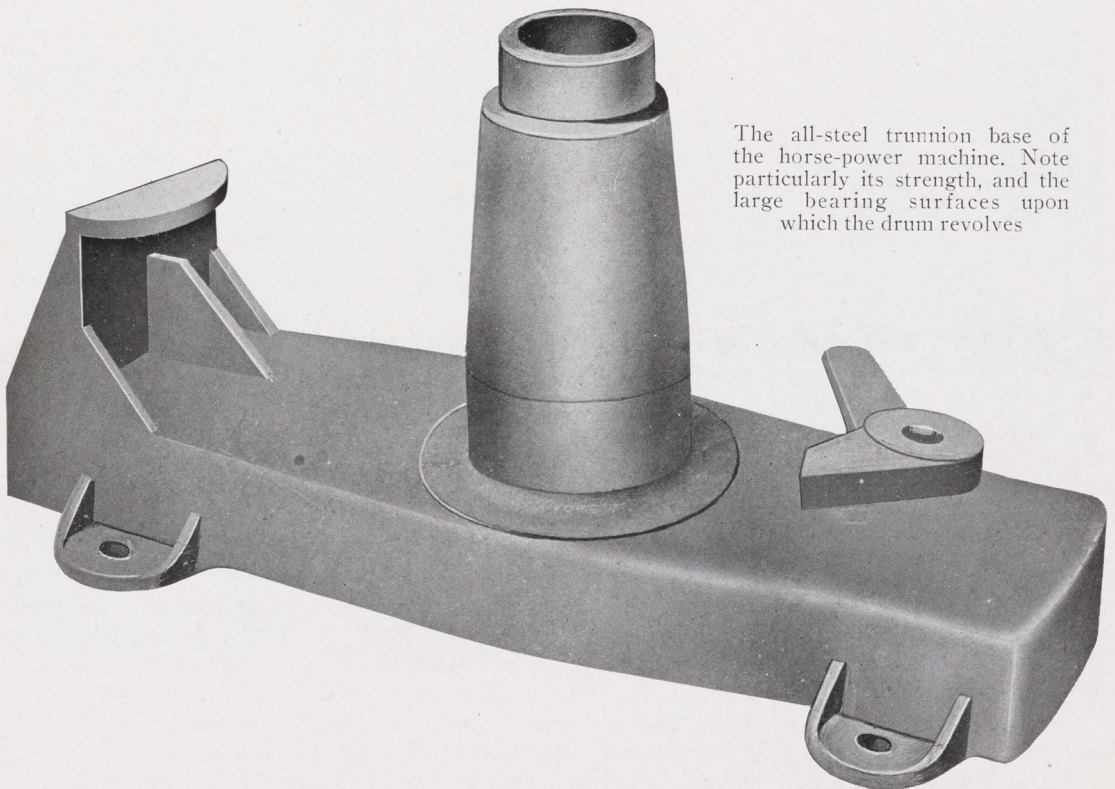
THE BULL DOG HORSE-POWER STUMP PULLER

THE horse-power machine, like the hand-power machine, is quality throughout, but its use is somewhat different. As we have already seen, the horse-power machine is suitable for work on level land, where there are a large number of big stumps to be pulled and where one or two horses are available for its operation. It does its work cheaply and efficiently. In every detail it lives up to the title of "A New and Better Stump Puller."

You would be greatly pleased if you could see it as it actually stands. It is both compact and simple. It stands less than 24 inches high to the top of the boom, measuring only 17 inches high to the top of the drum. The base is 36 inches long, 15 inches wide, and stands on four bed timbers which extend on two sides of the machine five feet. The low structure of the machine, together with this solid base, does away with all danger of tipping under the hardest strain.

Its compactness makes operation extremely simple. A list of the different parts of the machine includes only five items: The all-steel trunnion base, the drum, the sweep or boom box, the boom release clutch, and the brake pawls. Nothing to come loose—no complicated parts to put together. You can be sure that you have in the Bull Dog the most workable, the most satisfactory machine that can possibly be made. The whole outfit weighs only 350 pounds—a remarkably low figure when you consider the power which can be exerted with it, and that it can easily be moved from place to place on its skids.

The machine is shipped to you complete in every detail except for the bed timbers and the boom, or sweep. We have omitted these because of the heavy freight cost on them. It is cheaper for you to make them yourself, either from trees or from rough lumber. The freight charge on the horse-power machine is in this



The all-steel trunnion base of the horse-power machine. Note particularly its strength, and the large bearing surfaces upon which the drum revolves



Above is shown the 60-ton hitch. Mr. Johnson has only one arm, but with the aid of his 16-year-old son he had no trouble in changing a cut-over section into a most valuable orchard



Another photograph showing how thorough the 90-ton Bull Dog Horse-Power Machine is in removing the roots of stumps. The roots of this immense fir stump had a spread of over 32 feet. By comparing them with the man in the picture you will get a good idea of their size

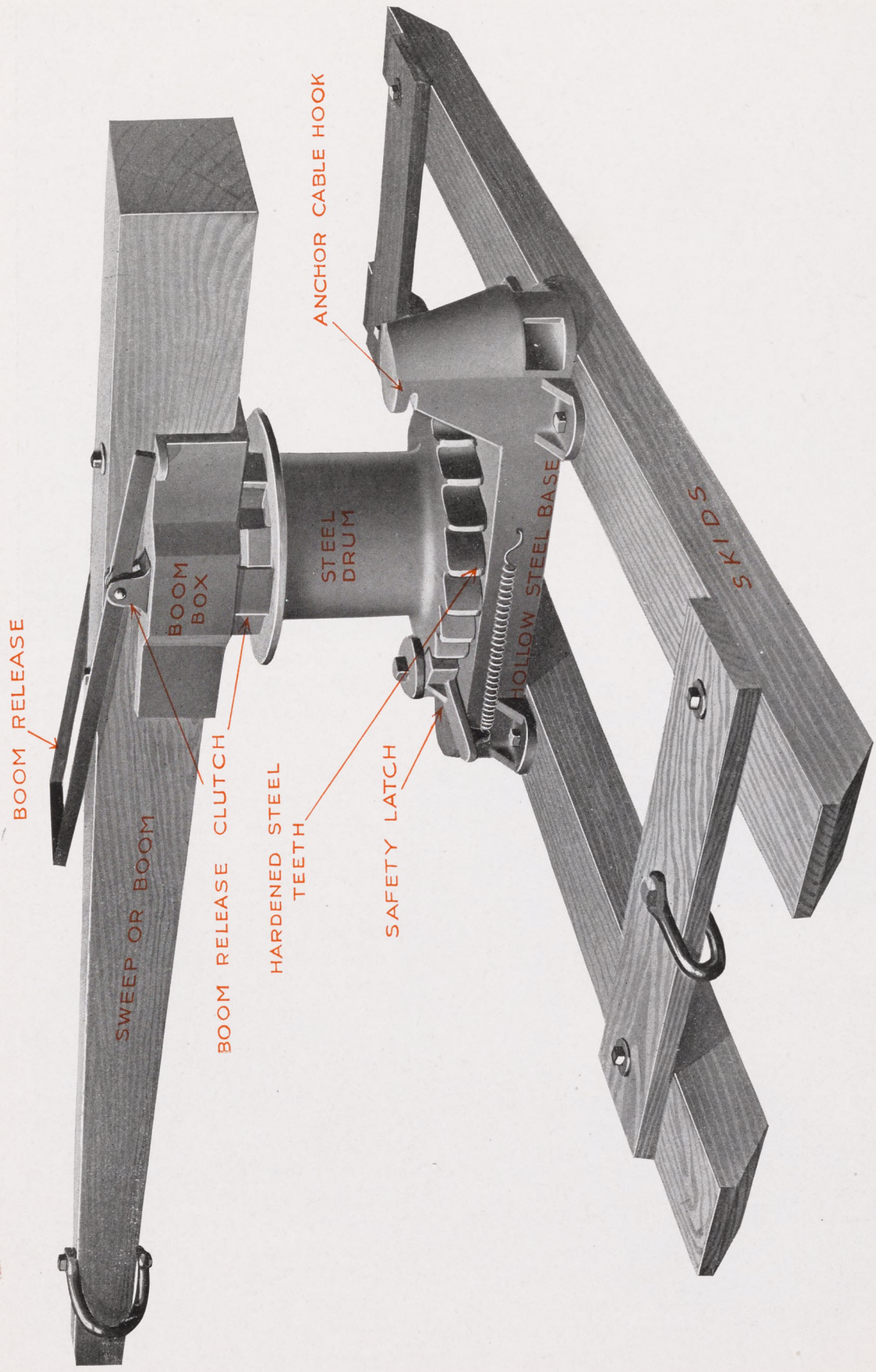
way lowered almost 40 per cent. Except for these parts, however, the machine comes to you ready to be set up for the hardest work.

Trunnion Base

The steel base of the horse-power machine shown on the page opposite is a very ingenious piece of work, hollowed out and heavily ribbed, thus securing not only a very strong design, but a structure stiff

enough to do away with all danger of distortion. The two bearings on the spindle which support the drum are made of chilled steel, which produces a close-grained metal well adapted to wear. They are of especially large design in order to do away with the heavy pressure which on a smaller bearing would squeeze out all grease or oil, and permit the metal surfaces to become badly worn. The liberal bearing surface makes sure that there will always be a thin film or layer of oil between the sliding surfaces. To supply these surfaces with oil there is a specially designed oiling system on the Bull Dog Horse-Power Machine which is explained in detail on page 36.

One end of the base is cast to form a large hook around which the anchor cable is passed. This hook is of hollow design, doubly strong, and is a part of the base casting—not a separate part which might become loose or break off.



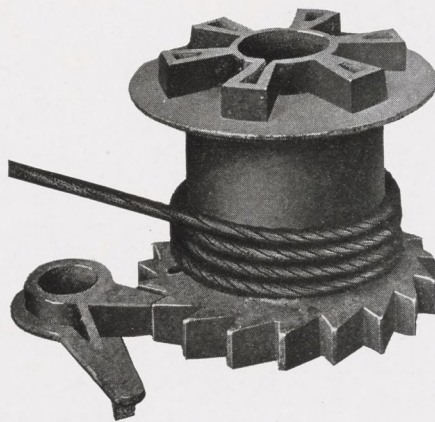
THE BULL DOG HORSE-POWER MACHINE

All-Steel Drum

Fitting over the trunnion base is the drum—a solid piece of metal made from tough, close-grained steel. The teeth are all accurately spaced and can be relied upon to hold safely every inch of cable wound on the drum under either a steady or intermittent pull of a team of horses.

In these teeth work a safety latch, with its points hardened to resist wear. This makes it impossible for the drum to ever get out of your control. Right here is a big point in stump-puller drum construction. Should your harness break when using a stump puller without such a device, the high tension of the cable would reverse the motion of the drum at lightning speed, with a great possibility of injury to you or to your team. This safety latch cannot be too strongly emphasized. It saves both dollars and minutes, and is a precaution you cannot afford to overlook.

On the upper end of the drum are cast six large, heavy teeth, which are engaged by the teeth of the boom, or sweep box, shown below. By simply raising the long handle these teeth are disengaged and the horses can step forward without any load until the drum is re-engaged. The drum, however, is held rigidly in place all the while by the safety latch, thus keeping up a firm tension on the pulling cable. This is a convenient feature when there is any particularly bad spot under the horses' feet. This releasing device enables the



All Steel Drum and Safety Latch

team to step forward to better footing before resuming their pull.

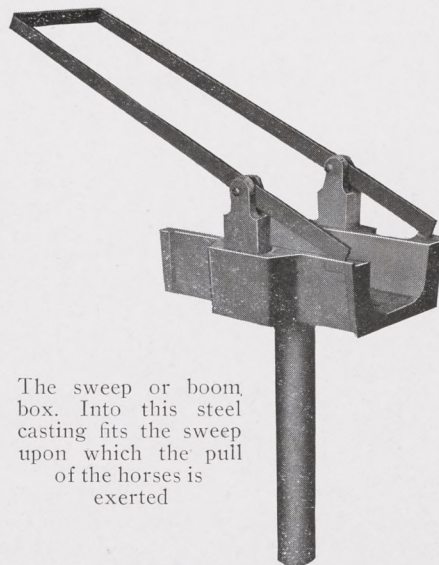
The cable is fastened securely to the drum, but in such a manner that it can be released in an instant and removed from the drum. This enables you to take the cable indoors in case you wish to leave the machine outside for any length of time. This is an important point, as cable

rusts easily, and rapidly becomes weakened if not protected from the wet.

Sweep or Boom Box

The sweep or boom box shown below is a solid steel casting, with no joints or bolts, into which fits the wooden boom to which the horses are hitched. The trunnion shaft, which runs from the boom box down through the drum, is not only long, but large in diameter, thus distributing the strain equally. A large pin is passed through the lower end of the trunnion. This pin holds the base, drum and the sweep box all together firmly, making the machine not only simple but compact. The wood boom itself is held firmly in the boom box between two flanges.

On the sides of this boom box casting are two heavy reinforced pockets through which the boom releasing teeth operate. This device releases the boom from the drum and enables the horses to step forward without winding up the cable. The drum, however, is held rigidly in place and there is no release of the strain on the pulling cable or on the stump.



The sweep or boom box. Into this steel casting fits the sweep upon which the pull of the horses is exerted



A northern rancher pulling a large redwood over 35 inches in diameter with the triple-power hitch. He says that he pulled this giant in less than 15 minutes



Compare the length of these roots with six-foot John Segwick, shown in this picture, and you will get a good idea of what to expect of the 90-ton horse-power puller. You will note that the roots are pulled out—not chopped or broken off in the ground, to give you trouble later when it comes time for plowing



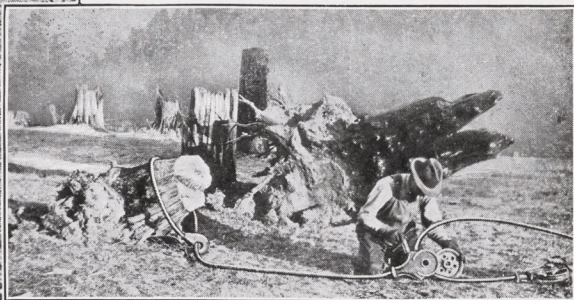
A fair example of the tremendous power of the 90-ton horse-power Bull Dog. One root of this 34-inch fir stump was 36 feet long, and another root was 16 inches in diameter. But they came out in 17 minutes, *with the stump*, although they were firmly embedded in dry soil. Still "Daddy" Cole, seen in the picture, will tell you that the Bull Dog never "weakened"



John Young and his son, of Nevada, are making headway on their forty acres. Mr. Young says, "Some of these stumps are mighty tough customers, but they are coming out. Everything has proven to be just as you claimed it, and I am mighty glad I ordered the 90-ton machine"



Pass any unused part of the long $\frac{7}{8}$ -inch pulling cable around the take-up, allowing the surplus to be idle on the ground. This saves your cable (see cut on the left)



A power pulley (see above) is mighty easy to attach. Take out a pin, insert the cable, and in less than a minute you will be ready for work. There are no latches or springs to come loose and bother you. Each pulley introduced doubles the original power of the machine

Reliability

Also note the absence of all bolts and loose flimsy "extras." The Bull Dog type of construction costs more, but in the long run it is worth every cent put into it. In a stump puller there is no place for soft steel, weak bolts, cheap cable, or other money-saving propositions. A coat of paint will cover up a multitude of sins, but they will come out to bother you when you start to use the machine. As has been stated many times, the Bull Dog machine is a quality machine. We know that you will agree with us when you put it to work.

Oiling

Stump pullers, like any other machinery, stand up most efficiently when properly lubricated. The Bull Dog Oiling System is simplicity itself and eliminates the drudgery usually met with in this work. The top of the drum of the horse-power machine is fitted with a large cup holding a half pint of oil, which first oils the top bearing and then in turn runs down to lubricate the lower bearing. Any excess oil is caught in an oil well, where it automatically oils the bearings as the work goes on. Not a bearing is exposed to sand or dirt. They all are encased in dust-proof pockets.

Proper oiling is a big point in a stump puller. If the bearings are kept in first-

class condition all the time, as they are in the Bull Dog, the machine naturally works easier. There is less friction, and on big stumps you will find your machine out-pulling any machine of equal power with no lubricating system. There is always a film of oil between the steel parts which work over one another. You are careful to keep your wagon wheels well greased, and yet they rarely have a strain on them of more than a ton. Think of the enormous friction on a dry bearing standing a strain of 30 tons. This one point of Bull Dog construction you will find of great value.

The oiling system works very well on the large chilled steel bearings of the drum and base. Large bearings combined with a good oiling system give you a very easy running machine. Compare these features with any machine on the market. We know that you will find them ahead of anything yet produced. You will find the Bull Dog method up-to-date and a big money saver. It is such features as the lubricating system that make the Bull Dog a "better stump puller."

One Last Point

We furnish plenty of cable, hooks, loops, blocks, and even a root hook. There are no extras to cost you money after you have actually bought a Bull Dog.



These stumps show the destructive work of the 90-ton Bull Dog Horse-Power Machine. Some of these stumps measured as large as four feet in diameter and had roots up to 37 feet long. Not a stick of dynamite was used in getting them out of the ground

JUST WHAT YOU GET WHEN YOU BUY A BULL DOG STUMP PULLER

Hand-Power Machine

Let us briefly say once more just why we believe the Bull Dog Stump Pullers to be "better machines." The hand-power machine is all steel, compact and light. The frame is one solid casting, of reinforced construction, and shaped with the greatest care. The drum also is cast steel, with teeth especially hardened to resist wear. The cable is of the best quality, and there is enough of it to make operation easy. The hooks, loops and blocks are all strong. The steel root hook, with its sharpened teeth, will take hold of any root. Cable babbitted to hooks and loops in the most approved way. A light machine for fast, easy work. We believe it to be a winner in any conditions calling for a hand-power machine.

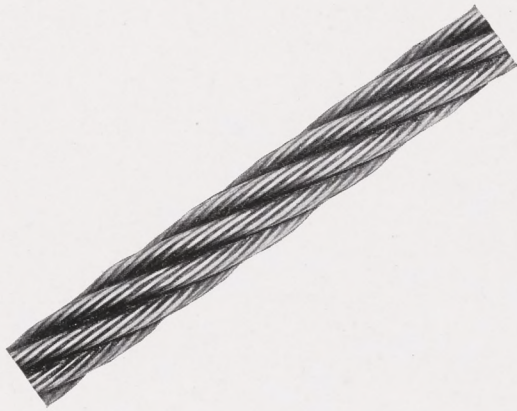
Horse-Power Machine

The horse-power machine has a cast-steel, tubular base, with exceptionally large bearings for the drum, which turns upon it. The drum, like that of the hand-power machine, has hardened teeth, in which works a safety latch to protect you and your horses. The boom box, which fits into the drum, is one piece and can quickly be freed from the drum by a handy lever. The hook at one end of the base, cast with it, gives a solid hold for the anchor cable. The hooks, loops, blocks, take-up, root hook and cable, as in the hand machine, are all of tough steel. Light enough to be easily moved. A sturdy, powerful machine for heavy work. Built to stand up under the strain of big stumps.

Compare these points with any machine on the market.

The Bull Dog is built for satisfaction.

BULL DOG EQUIPMENT



Steel Cable

NEXT to the stump-pulling machine itself the steel cable is the most important factor in the work which a stump puller must do. Cable, of course, like all other articles, varies in quality and price. The steel cable furnished with the Bull Dog Stump Puller, however, is designed to do the work required of it.

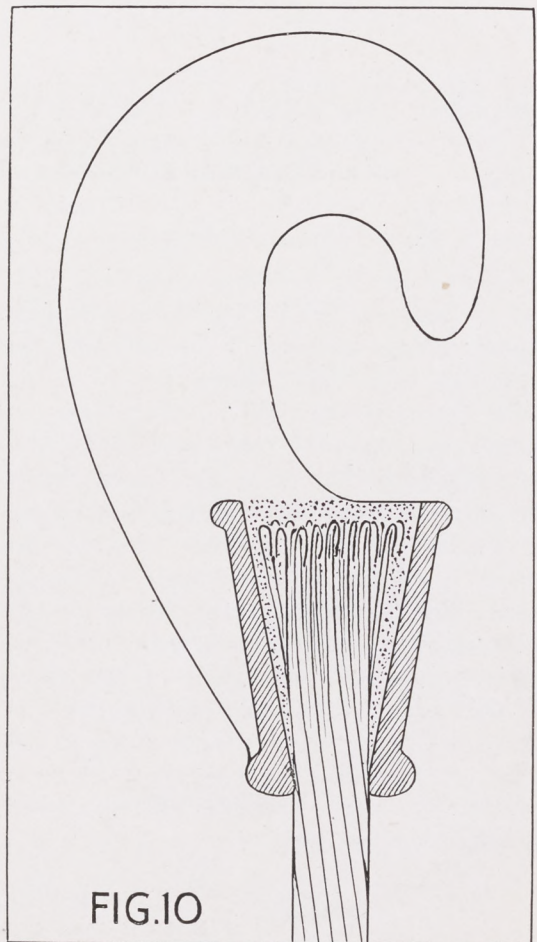
Should you buy a weak cable, it will soon break, and it is not an easy matter to splice one after it has broken. The Bull Dog steel cable is strong and yet it is pliable enough to work around the drum, pulleys and hooks. In addition it is light enough to be moved easily from place to place. The Bull Dog steel cable pictured above is made of 114 individual, high-tensile strength wires, wound about a central core—the most approved method of cable construction. This cable in $\frac{7}{8}$ -inch size shows a test strength of 35 tons, which is five tons over the required strength. Every part of Bull Dog cable is uniform. This is most important, because, remember that just as a chain is only as strong as its weakest link, so a cable is only as strong as its weakest part. Following is a list of Bull Dog cables, with their tested strength in tons:

$\frac{5}{8}$ -in. diameter	. . .	Strength 19
$\frac{3}{4}$ -in.	“ . . .	“ 26
$\frac{7}{8}$ -in.	“ . . .	“ 35
1 -in.	“ . . .	“ 45
$1\frac{1}{8}$ -in.	“ . . .	“ 55
$1\frac{1}{4}$ -in.	“ . . .	“ 70

Bull Dog cable is fastened to the drum in such a way that it is easily removed and taken indoors if you wish to leave the machine outside. This is a feature not often met with in the ordinary run of stump pullers.

Improved Bull Dog Method of Babbitting Cables to Hooks, Loops and Power Pulleys

Next in importance to the cable is the method by which it is fastened to the hooks, loops and power pulleys. Let no one mislead you on this point. There is only one satisfactory way to make such fastenings and that is by babbitting. It is the universal method used on elevator cables where human life is at stake. The Industrial Accident Commission has ruled: “The ends of all cables shall be



fastened by passing through tapered and babbitted sockets. The length of sockets shall not be less than four times the diameter of the cables." Every Bull Dog Stump Puller is so constructed. By inspecting drawing No. 10 you will see how every wire gets a firm grip in the metal, and how enormous tension only serves to draw this fastening tighter. Every one of the 114 wires is drawn through the hook, loop or pulley, and the end of each turned back like a fish hook. The hot babbitt metal is then poured in and when this hardens the cable is made fast for all time. Not only that, but it is held in such a way that every individual wire bears its own share of the strain on the entire cable. You will realize the importance of this when you consider that, should some of the wires bear more than their share of the pull, they are bound to be strained and perhaps broken, leaving the remaining wires to do all the work. Naturally this weakens the entire cable.

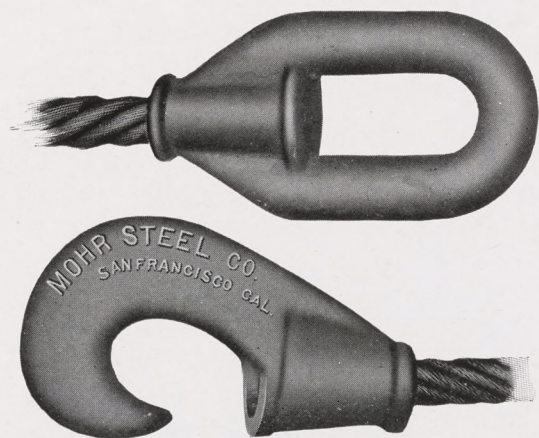
Anchor Cable

The hand-power machine needs no anchor cable as the drum cable goes directly around the anchor stump. The horse-power machine is furnished with an anchor cable like the one that is pictured below, with ends secured by a smooth, solid babbitted coupling, which is far more desirable than one held by either clips or hooks. For average conditions these anchor loops on the horse machine are ideal. Should your anchor stump be too high for the boom to pass over, or

should you anchor to a tree, you will need a longer anchor cable to permit the horses to pass between the machine and the anchor stump or tree. To take care of this we have made extra long anchor cables fitted with two hooks. These extra cables are described on page 42 under the head of "Long Anchor Cables."

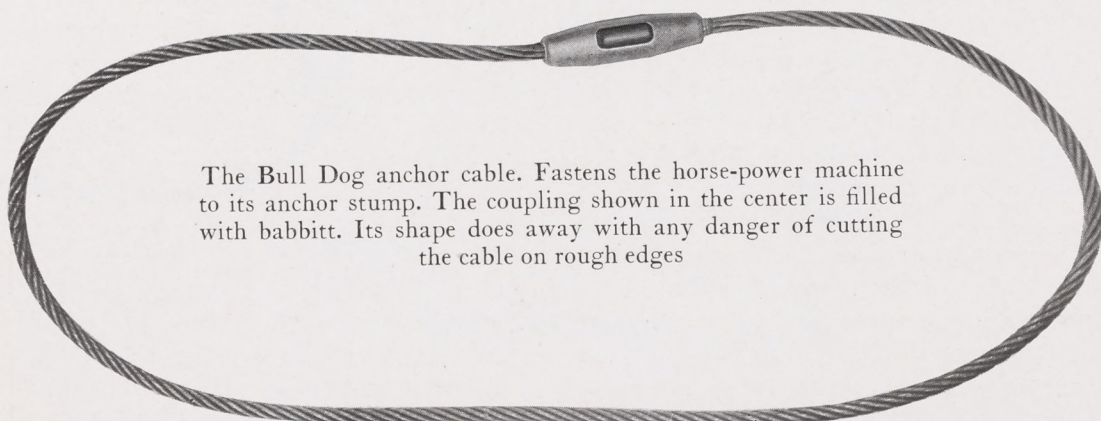
Cable Fastenings—Better, Stronger

The hooks and loops are all made of the finest steel and especially designed to stand the maximum pulling power with the least strain on the cable. If you will examine Figure 11 (top of next page), you will see the difference between right and wrong design. The wrong way results

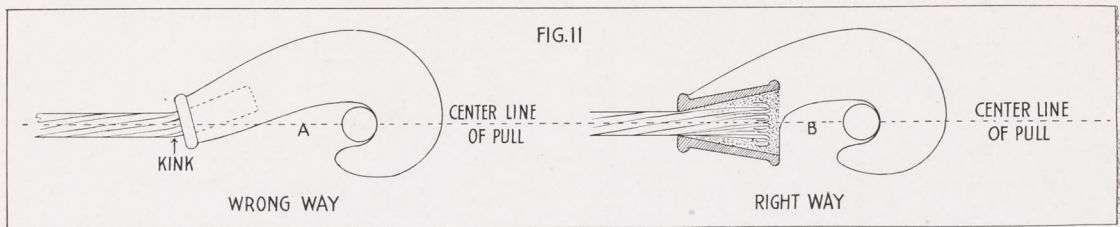


Hook and Loop

in a strain on the cable, which in time will either cut or break a great many of the individual wires in the cable. This reduces the pulling strength six or eight tons. In the Bull Dog design, the "right way," there is a straight line pull, as shown in Figure



The Bull Dog anchor cable. Fastens the horse-power machine to its anchor stump. The coupling shown in the center is filled with babbitt. Its shape does away with any danger of cutting the cable on rough edges



11, above; no unequal strain on the cable and no kinking where it enters the socket. This single point of construction means years of added life to the cable. Every point of both hooks and loops is made equally strong, designed to withstand a maximum strain, and you can rest assured that with a Bull Dog to do your work you will never be troubled by hooks and loops coming loose from the cable.

Easy-Working Power Pulleys

Each Bull Dog Stump Puller, whether a 30-ton, 60-ton, or 90-ton machine, is fitted with the necessary cable, hooks and pulleys to develop the required power. It



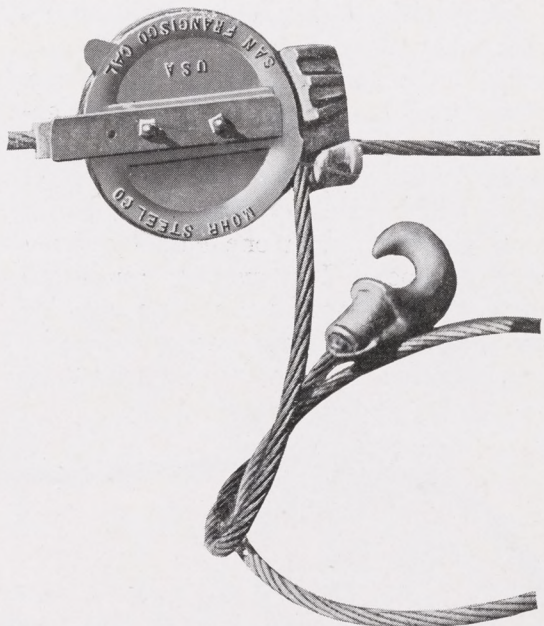
Pulley or Block

is in the wise use of the Bull Dog power pulleys that the tremendous power necessary to pull your stumps out is developed. The great part of this strain falls on the pulleys, and they are made to meet it. They are of the most approved design, and when it comes to strength they cannot be surpassed. Notice their construction as shown in the picture. The clevis to which one end of the cable is babbitted in a cone-shaped socket is made in one piece of annealed tough steel. It passes around each side of the grooved sheave and forms guides to keep the cable in proper alignment so that the cable will not run over the edges of the sheave and become damaged. The sheave runs on a steel

spindle or axle, easily removed for inserting the pulling cable. The hub of the sheave, where it fits over the spindle, has a grease pocket, which always keeps the bearing automatically lubricated. The use of axle grease here occasionally keeps it perfectly lubricated and in fine pulling condition. Note Figure 14, which shows how the pulleys are greased.

The Bull Dog Non-Crushing Take-Up

It often happens during a day's work that there will be short pulls to make—pulls, let us say, of 30 or 40 feet from the machine, and the question comes up of what to do with the slack cable. Of course it could be wound about the drum,



The Bull Dog take-up. Eliminates the use of any cable not needed. When there is no pull, the cable is removed without any trouble

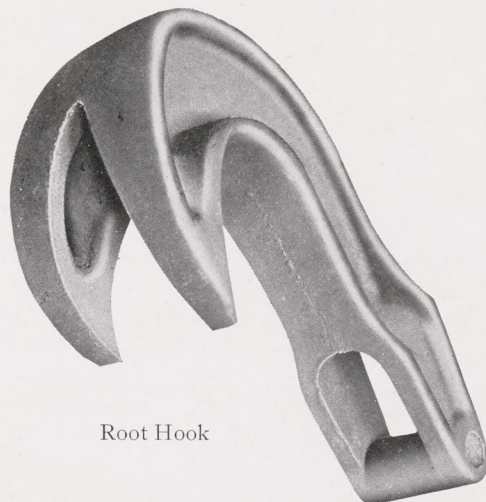
but this would be slow work and would mean constant wear on the cable. The simpler way is to use a take-up. The take-up, or grab, in its simplest terms, is a

steel device much like a pulley in construction, to which the drum cable can be fastened. The take-up itself has a short length of steel cable babbitted to it, which gives a new end on the drum cable at any point you wish. The length of drum cable not needed for a short pull lies free on the ground, and is saved from the strain of the pull or the wear and tear of being wound about the drum. The cable is held in the take-up by a firm pressure, much like the pressure of a hand. The harder the pull the more firmly does the take-up hold the cable. When the tension is released, however, the spring of the cable loosens the take-up and the cable can be easily removed.

In the Bull Dog take-up you are assured of having the best take-up that knowledge or skill can produce. It is built for a much greater strain than you will be able to put on it, but it is light enough to be easily handled. The gripping of the cable is done in a very ingenious way, and the rounding edges of the sheave and clamp where it touches the cable are so designed that there is no danger of crushing the cable. The whole idea of the Bull Dog take-up is to save your cable, and it is certainly successful in accomplishing its purpose.

The Bull Dog Root Hook

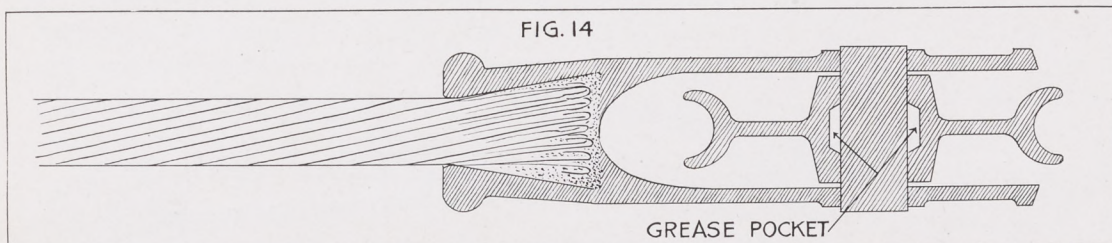
One strong point about the Bull Dog Stump Puller is that it comes to you complete in every detail. You get it ready for work and you will never be bothered in getting new or extra parts. The fact that we include a root hook with the machine is one proof of this fact. It is rarely found in other stump pullers, and yet you will agree that you can not properly pull



Root Hook

stumps unless you have one. Often in pulling large stumps one or more roots are broken off, and if they are not removed they will make a lot of trouble when it comes time for plowing. Or, again, it is often very hard when working on a low-cut stump to get the hold that is necessary to pull it out. The root hook is a practical working necessity. It is a strong piece of steel hooked to the cable, its point being divided to form a V-slot with sharp edges, which bite into the root or stump and hang on like "grim death."

Remember that the root hook is furnished regularly as a part of our equipment, at no extra charge, and that any stump puller is incomplete without it. Remember this when comparing the rock-bottom price of the Bull Dog with the prices of other less complete outfits. The root hook could be omitted—cheap cable furnished, a small drum used, and a dozen other details left out at a slightly lower price, but in the end you would be dissatisfied with the machine and would regret your purchase. We have built a



The above figure shows the grease pockets on Bull Dog Power Pulleys. The use of a little axle grease here keeps the pulleys in good condition, working easily, and saving wear and tear

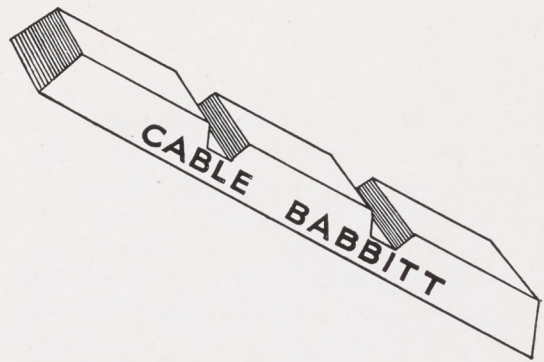
stump puller that will serve your every need; we ship you an outfit worth every cent you pay, complete in every detail, that will last you a lifetime. That is the reason why the Bull Dog has already so many satisfied friends, the reason that it will satisfy you in the long run. We have built thousands of stump pullers; they are used in all parts of the world under all conditions, and we know that the Bull Dog will give you real satisfaction.

Bull Dog Cable Clusters

The Bull Dog Cable Cluster (Figure 15 below) is one of the stump puller accessories rarely used in ordinary work and yet occasionally of great value. Its special work is pulling grape vines, brush, small stumps, hedges and grubs. The large loop is attached to the drum cable either with or without the take-up. With the aid of a Cluster three hitches can be made at a time and the work greatly speeded up. The three short lengths of cable are babbitted in the cone socket of the loop. Their other ends are fitted with steel hooks, securely babbitted. The cables measure 8, 12 and 15 feet. We recommend them highly for quick, light work. Not included in the price of the stump puller itself, but well worth getting if you have the work for which they are fitted.

Bull Dog Babbitt Metal

A great deal has already been said about babbitt, its importance and strength, but it is well to remember that like everything else it varies widely in quality. For cable requirements a free-flowing, tough metal is required. If sluggish or thick it will not properly grasp every individual wire of the 114 making up the cable. If too soft it will be pulled or forced out



under the great pressure. From long experience and many tests we cheerfully recommend Bull Dog Babbitt, and will guarantee it to do your work satisfactorily. It can be prepared for use in a ladle, skillet, or any other iron basin. About four pounds are required for each fitting of hooks and pulleys.

Long Anchor Cables

Every Bull Dog Horse-Power Machine is furnished with an anchor cable. Occasionally, however, one of our customers desires an extra long one, to permit his team to pass between the machine and the anchor stump rather than around it. In using these long anchor cables (Figure 18, opposite page), one end is hooked in the regular anchor cable furnished with the machine and the other end is passed around the anchor stump.

This extra long anchor cable is also used to lengthen out your drum line or to hook on the take-up or power pulley, thus allowing you to reach out still further from your pulling machine. The large number of orders received for this cable, especially the 40-foot length of $\frac{7}{8}$ -inch cable, indicates its popularity and convenience. Both ends of each cable are babbitted to smooth unbreakable steel hooks.

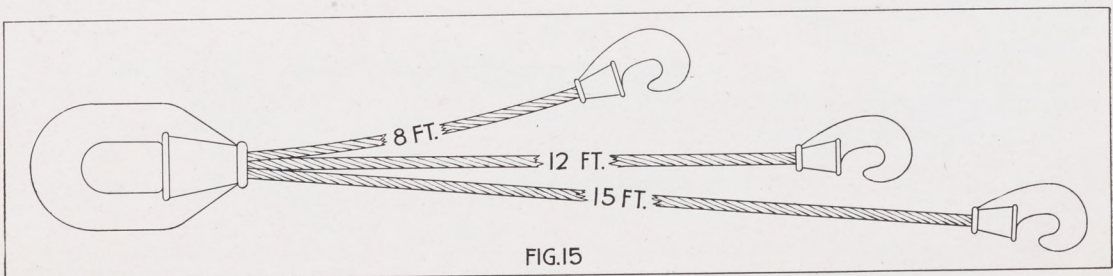


FIG.15
Cable Cluster

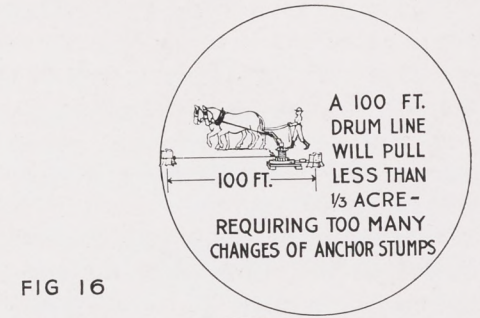
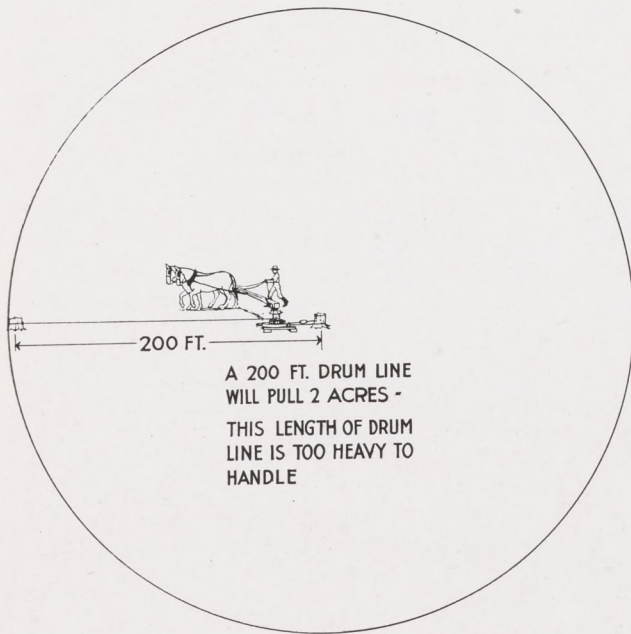
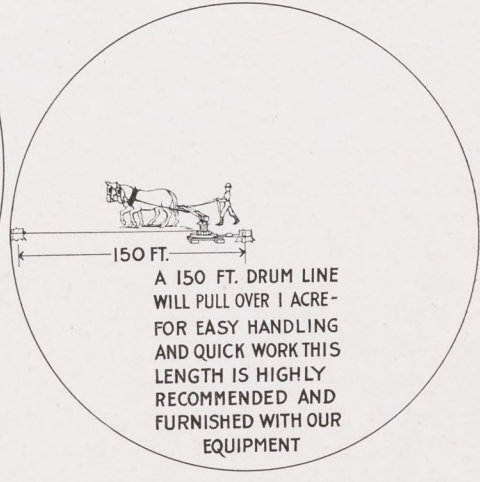


FIG 16



How Long a Cable Do You Need?

The length of cable which can be most efficiently used is a mighty important point. The accompanying diagram, Figure 16, shows graphically the different amounts of land which can be cleared from one anchor stump by various lengths of cable. While on paper it looks very nice to have 200 feet of drum cable, under practical working conditions it is pretty hard to handle that much with any comfort. It is too heavy a burden, and the extra land which can be cleared is not worth the effort involved. A short cable of 100 feet, on the other hand, is really too little to use to good advantage, as it makes a change of anchor stump necessary too often. A 150-foot long drum line represents the happy medium—just the right amount to handle. One acre cleared with a single move is just about hitting

the nail on the head. On ordinary stump land it means only one setting each day.

Why You Should Buy a Bull Dog

The Bull Dog Stump Pullers are new machines. They are made by men who have been in the business for years; but the Bull Dog machines themselves are new products, having all the ideas which have worked out well in practice and none of the faults which have been shown to be undesirable in other models.

Bull Dog Stump Pullers are built in San Francisco, in one of the finest plants of its kind on the coast. Every convenience is at hand to do fine work on these machines. The machines are tested at every stage of their manufacture. The materials are examined when they are received, the parts are carefully inspected for flaws, and every machine is given a working tryout before it is shipped to

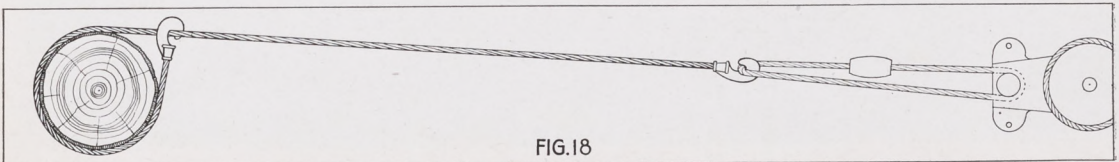


FIG.18

you. This one fact accounts for the number of testimonials which Bull Dog owners have sent in to this company. Read the letters published in this catalog, and you will see the favorable impression made by Bull Dog machines on men who actually own them.

One big point about Bull Dog Stump Pullers is that they come to you fully equipped and ready for work. There are enough hooks, loops, cable, pulleys and blocks to equip them completely. No need for you to worry about buying extras. We even give you a root hook, which, as far as we know, is not done by any other manufacturer, except at an additional price.

The price which we quote on these machines covers all this equipment. It is a rock-bottom price, the only one which we quote to you. We have said before we do not make one price and later offer you a discount. We believe that the Bull Dog machines are worth all that we ask for them, even more, and we know that you will be well satisfied with them when you see them in operation.

To make doubly sure that these machines will be satisfactory, we cover them with a binding guarantee which fully protects you from loss. This guarantee promises you that Bull Dog Stump Pullers are just as we have represented. If they are

not, you will receive your money back with interest at six per cent to cover your investment.

If you should move to another locality and find conditions changed, you are protected by our exchange policy. We will take back your hand-power machine and exchange it for a horse-power machine, or the other way round, and we will do this in such a way that you will not lose any money in the transaction.

We make both types of machines, both hand power and horse power. We do this because both types are needed. Under some conditions, a hand-power machine is the better, under others a horse-power machine is preferable. You can tell which type you need by reading over the catalog carefully. Make no mistake on this point. If you are uncertain which type you need, write us, and we will be only too glad to advise you on this matter. Mr. Mohr will give you this information, and it will be done with no obligation to you.

After considering all the points of the Bull Dog machine, we are sure that you will agree with us that they are the best machines which can be put on the market. They are strong, light, and absolutely safe. They are built for the hardest kind of work, and will develop more than enough power to "yank" out any stump.



Another illustration of the Bull Dog's power to get out roots and all

STUMP PULLER POWER—REAL AND ADVERTISED

What the Bull Dog Will and Will Not Do

THROUGHOUT our description of Bull Dog Stump Pullers we have tried to underestimate its power rather than to make any extravagant claims. But we do say that it has more than enough power to pull any stump which any other puller can move, and we believe it can do it quicker and with less effort. A $\frac{7}{8}$ -inch cable has been shown by long experience to be by far the best size for every-day operation. Larger cable than this is heavy and very hard to handle. Consult the catalog of any cable maker in the country and you will find the following figures:

A $\frac{7}{8}$ -inch best quality steel cable will stand 30 tons safely. 1-inch best quality steel cable will stand 40 tons safely. $1\frac{1}{4}$ -inch best quality steel cable will stand 65 tons safely.

As you can see, the cable is the part of a stump puller that really determines how much of a pull the machine can exert. For any manufacturer to boast that his machine will pull on a straight pull 90 tons is foolish. His machine may be

able to exert this much pressure on the drum, but if the cable cannot stand the strain the extra strength of the machine is of no value. We have built a stump puller which will develop the maximum strain which the cable will bear. More power than this would be useless. With the Bull Dog machines you can develop, by the aid of the hitches already explained, 30, 60 or 90 tons power. Such power is all that you will ever need on any but the largest stumps. Should you have a few unusually big stumps, it will be wiser for you to loosen them first with a little dynamite. Then your Bull Dog will "yank" them out quickly. Bear in mind that great power needs heavier cable, and heavier cable means that you will need extra help to move your equipment about. The Bull Dog Stump Puller, with its strong $\frac{7}{8}$ -inch steel cable, is capable of pulling 99 out of 100 stumps. We believe you will agree with us that the Bull Dog is the ideal machine for every ordinary purpose and the one that is going to suit your needs.

WHAT NOT TO EXPECT

WE have never misrepresented a single fact in order to sell our stump pullers. Bull Dogs are so worth while that, once seen, they sell themselves. We are anxious to have you know just what kind of a machine you are getting when you order a Bull Dog. We want you to know what it can do, and what it can not do.

Some firms may try and give you the impression that their stump pullers will pull every stump that ever grew. This may be true. Frankly, we do not believe this statement. There are some stumps that cannot be pulled unless they are first loosened with a little dynamite. For average conditions, in fact for 99 cases out of a 100, the Bull Dog will do the work

quickly and with little effort. The two Bull Dog hand-power models are designed to exert a pull of 30 or 60 tons; the two Bull Dog horse-power models are designed to develop either 60 or 90 tons. This power is plenty great enough to pull 99 stumps out of a 100. It is more economical to loosen the hundredth stump with dynamite than to buy a more expensive, heavier and unwieldy stump puller.

Bull Dogs are winners in power and price. Your problem is only to decide whether a hand- or horse-power machine will best serve you. The Government report on page 5 will help you in this decision. Sixty or ninety tons is a tremendous pull—a pull strong enough to fully satisfy your needs.

WHERE THE BULL DOG GETS ITS QUALITY

THE longer you farm the more you come to know about farming. As time passes you pick up new ideas and discard old ones. It is just the same in making stump pullers. New ideas are always coming up, old ones going into the discard. The men at the head of the Mohr Steel Company have been building stump pullers for years. During this time they have seen the gradual improvement which has been going on in this business. They have learned just what ideas will really work out in practice. They have specialized on construction until the Bull Dog has been made just as strong, quick acting and efficient as brains and experience can make it.

Only the best grades of materials are used in making the Bull Dog. Every piece of steel is tested first in our laboratory and later on the completed machine is put to severe tests to make sure that every part is up to required strength.

The best materials, combined with expert construction, result in the Bull Dog being such a high-class machine. But back of all that are the brains and experience of the men at the head of the Mohr Steel Company.

They are experts, every one of them, from Mr. Mohr, the president, right on down the line. Mr. Jewell, the vice-president, has had twenty-five years' experience with steel castings; Mr. Haase, secretary of the company, is particularly skilled in pattern making; and Mr. Barber, head of the machinery department, knows machines and steel tools from every angle. Is it any wonder that these men, working together on the basis of their previous experience, have been able to produce a machine ready for the hardest work?

Don't Forget Our Guarantee

In the catalog you will see a specimen guarantee filled out as a sample. With every Bull Dog machine goes a similar guarantee filled out to the purchaser. If you will read it through, you will see that we guarantee the Bull Dog to develop all the power we have claimed for it. The hand machine will develop 30 tons with one block and 60 tons with two blocks; the horse machine 60 tons with one block and 90 tons with two. If the Bull Dog is not as we have represented it, we will be glad to refund you the price of the machine with interest at six per cent.

The Bull Dog Exchange Offer

Beside our guarantee we have a fair and square exchange plan by which you can exchange your hand-power machine for a horse-power machine, or the other way round. If you move to a new place where conditions are different and you want to exchange your machine, write us. We will see that you are satisfied and that you don't lose any money in making the change.

Take Advantage of Our Experience

You may be bothered with a number of special conditions on your stump lands. You farmers of the West have to deal with giant firs with tap roots firmly embedded in the soil, you of the Northwest with spruce and hemlock, you of Florida with palmetto roots, and you of the Southeast with great yellow pines. Conditions vary everywhere. There is as much difference in the pulling of different kinds of trees as there is in farming different kinds of crops. You may have stumps that will come out with little effort. Or you may have roots that will take a heavy, powerful machine. The roots of a tree, whether they are tap or lateral, and the soil in which they are found, are both important features.

We want you to write in to our office for advice. We've been specializing on stump pullers for years and have established a department to give you just the advice you need. Take advantage of it without any obligation on your part whatever. It costs you nothing and we will be glad to serve you.



The furnaces from which the steel is turned out for Bull Dog castings. Care and skill help to make machines which we believe to be stronger than any on the market

WHERE THE BULL DOG STUMP PULLER IS MADE

BULL DOG Pullers are produced at our factory in San Francisco, one of the finest steel plants in the country. The plant is self-containing. Every process, from the working of the crude metal to the assembling and the testing of the parts, is done here. Here the crude product is smelted, refined and worked into various parts. Within the factory are the best workmen that we could gather around us. They are men old in their trades, men who can be depended upon to turn out first-class work.

Above we have the furnaces for melting the steel. By having these furnaces in our own plant, we are assured of getting only the highest quality steel—steel that we are sure is right in every particular. In the heat-treating furnaces all metals are annealed and tempered, and some of the parts especially hardened to resist wear.

Note the pictures on next page. See the steel winding drums in process of construction. Note the accurately formed teeth for the ratchets. These are worked with the greatest care, as it is by them that the drum is held in place if anything goes wrong with the harness of the horses working the boom. Poor construction at this point would endanger both you and your horses.

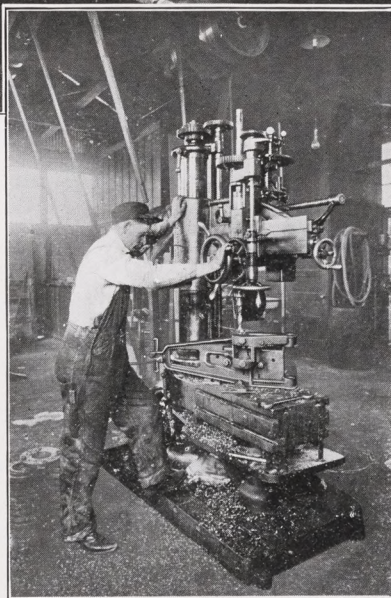
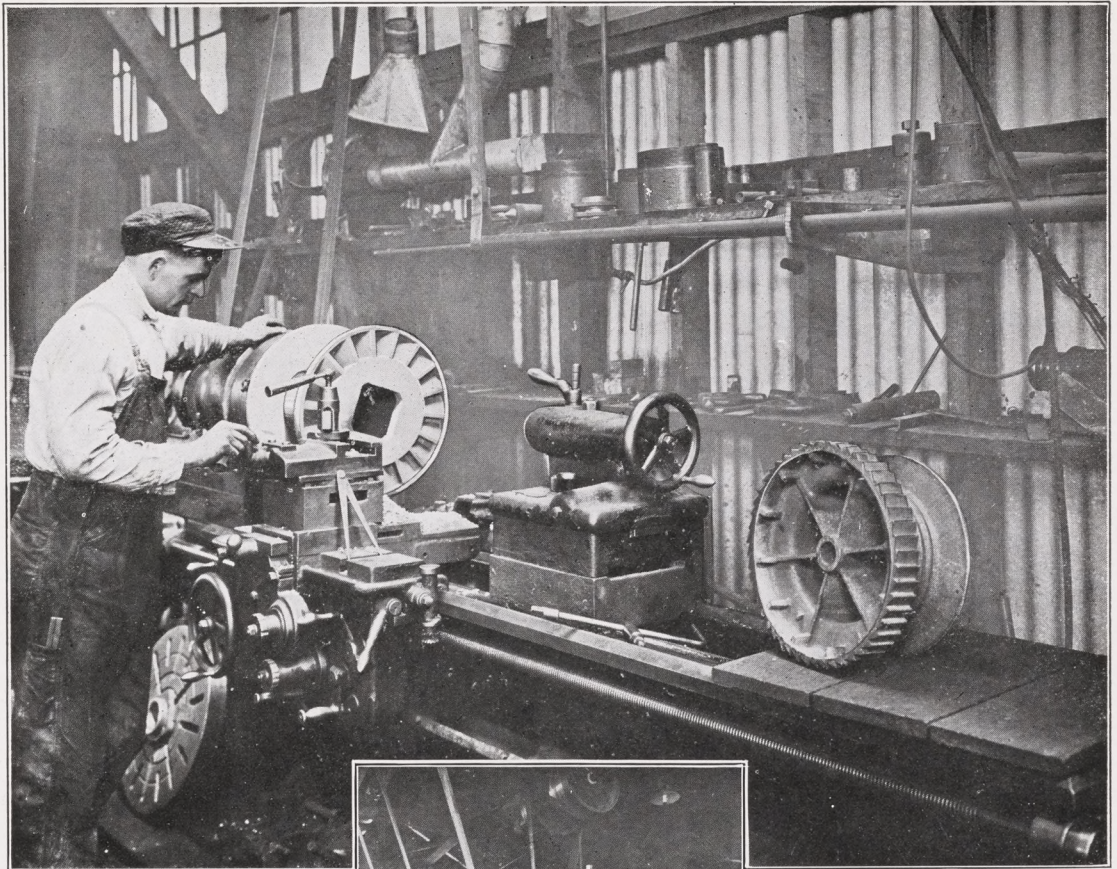
Upper picture, next page, shows the

machining of drums, and below the finishing of frames. Upon such machines each part is bored, turned, ground, polished and hand finished up to the proper limits. Such machines as they insure accurate construction, especially of all parts that enter into the bearings.

There are also enormous drop-hammers which form the parts. Under tremendous pressure they shape the steel parts to withstand the hardest strain.

One of the features of the plant is a testing machine. All metals are tested before they are accepted to determine if they are of proper strength. Chemists keep check on the metal in the different steps of manufacture. Each part is inspected by experts, and no machine is shipped from the factory before it has been given a thorough try-out. Every known precaution is taken in this way to insure you a perfect product. We have done everything in our power to make the Bull Dog a high-class machine, and to see that it reaches you in the best possible condition.

The foregoing just touches on some of the points of interest in the factory. But they are typical of all the rest. The Mohr Steel Company has set out to build a stump puller that shall really be "a new and better stump puller." To accomplish this, the makers have taken every step in



their power. The factory is one evidence of it. If you need a stump puller, and want the best there is, you will make no mistake in ordering a Bull Dog.

Remember, too, that when you buy a Bull Dog Stump Puller it is fully equipped with all the necessary cable, blocks, pulleys, take-up, hooks and loops that are necessary to develop the tremendous power that will "yank" out your stumps. Nothing has been overlooked. We even give you a root hook for pulling out low-cut stumps and roots, and this root hook is furnished *with the complete machine*, not at an extra charge, as is the case with other stump pullers.

We believe that the Bull Dog is the

Heavy machines bore out holes with the greatest accuracy. Accuracy is one reason for the ease with which Bull Dog Pullers work under strain

Working on the all-steel drum. By careful machine work, Bull Dog steel drums are made equal to the greatest strain. Note the hardened teeth and the ribbed tubular construction of the finished drum on the right

best stump puller on the market today. Its construction can't be beaten. It is absolutely guaranteed for three years. It is making money for thousands of farmers all over the country, and it will do the same for you.

If you have stump land and you want to clear it quickly, cheaply and easily, buy a Bull Dog Stump Puller. We feel sure that it will fill the bill in every particular. You will never be sorry that you bought one, and we feel sure you will find it a very profitable investment—a real money saver and a machine that will quickly pay for itself.



PRICE LIST

HORSE-POWER MACHINES, HAND-POWER MACHINES AND EQUIPMENT

AS we explained in the catalog, the Bull Dog Stump Puller is made in four models, the 30- and 60-ton hand-power machines and the 60- and 90-ton horse-power machines. In this price list are given the prices of the different types. They are the only prices quoted—to you, your neighbor, or to any one else. We believe in the long run this is the fairest way to handle the proposition. It often happens that manufacturers put one price on their product, later they offer a special discount, and still later they come to you with their special agent's plan. Their prices do not represent honest value. After purchasing such a machine you may find that some other man has bought one at a lower price than you have. You will agree that such a method of doing business is not a satisfactory one.

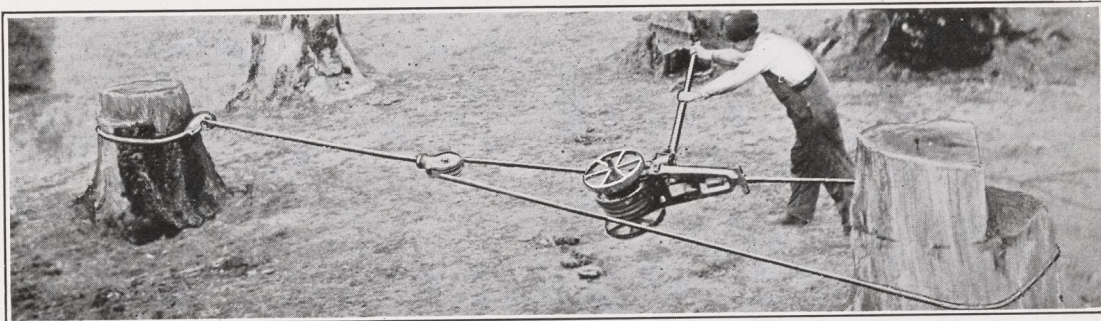
The prices of the Bull Dog are rock-bottom. Every dollar paid for a Bull Dog Stump Puller represents a dollar's worth of stump puller value. We are doing a strictly cash business. A credit business is always expensive; it has been estimated that it raises the selling price of an article about 10 per cent. In a credit business there is the cost of added clerical work, the cost of interest on the money tied up in machines, and the cost of providing for customers that may prove to be "poor pay." By eliminating all these expenses we are able to quote you the lowest price possible for the machines we are selling.

We know that the machines are worth every cent we ask for them. In our catalog we have pointed out to you just why the Bull Dogs are worth-while machines. The

materials used in building the Bull Dog are the best we can buy. Every good idea in stump puller construction has been utilized. The Bull Dog is absolutely the best machine that we can make, and we believe it is the best one on the market. In materials, construction and equipment it is complete. We could have made it of poorer steel, we could have used small castings, fastened together by innumerable bolts, and we could have reduced the amount of cable, and eliminated certain pieces of equipment such as the root hook. But in the end you would have been disappointed in your purchase. When you buy a Bull Dog, you get a machine fitted out to do your work in the best possible manner. The price is the lowest we can quote you for the value you will receive.

30-TON HAND-POWER BULL DOG. PRICE \$175.00

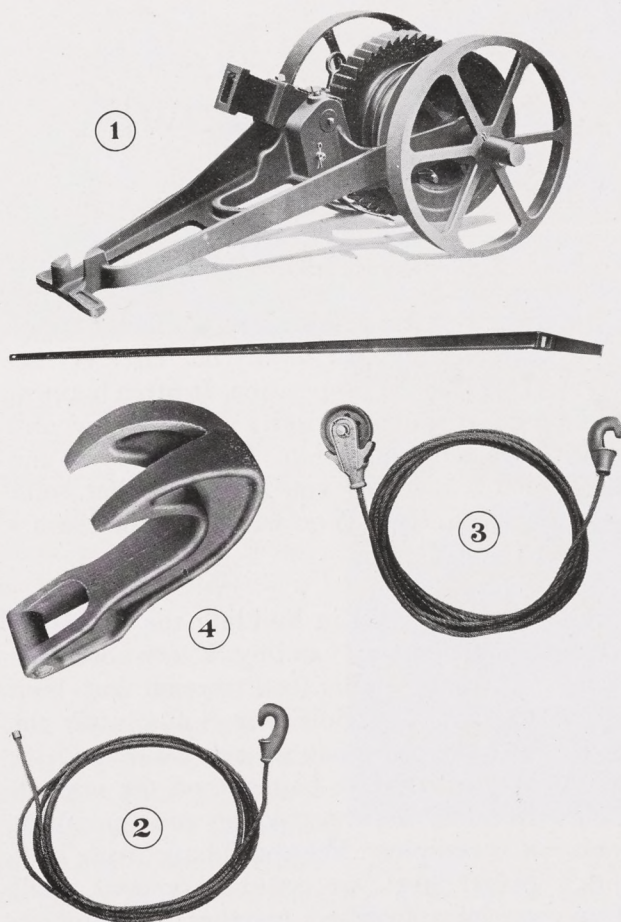
Weight with Equipment, 340 Pounds. Code, Hanthre



Complete 30-ton equipment in actual use

Specifications

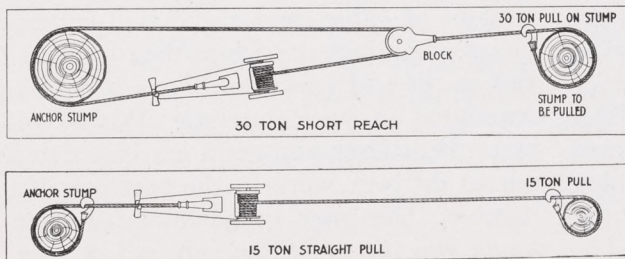
- No. 1.** Hand-power all-steel machine, with nickel-steel shaft, tool-steel hardened ratchets, and all details the same as described elsewhere.
- No. 2.** 60-foot $\frac{3}{4}$ -inch Bull Dog steel drum line, with steel ferrule on one end and a steel hook babbitted to it on the other.
- No. 3.** 14-foot $\frac{7}{8}$ -inch Bull Dog steel cable, with hook on one end and 30-ton power pulley on the other.
- No. 4.** All-steel root hook.



The above equipment is exactly the same as that furnished on the 60-ton machine shown on the following page, with the exception that there is only one power pulley and two cables. This equipment, however, is sufficient to develop 30 tons power, as shown in the diagrams. Should you order this equipment and later wish to increase its power to 60 tons, you could order the extra 80 feet of power line, with hook and block, the extra power block with cable, and the take-up with cable and hook. With this equipment you would have exactly the same machine as the one described on the following page.

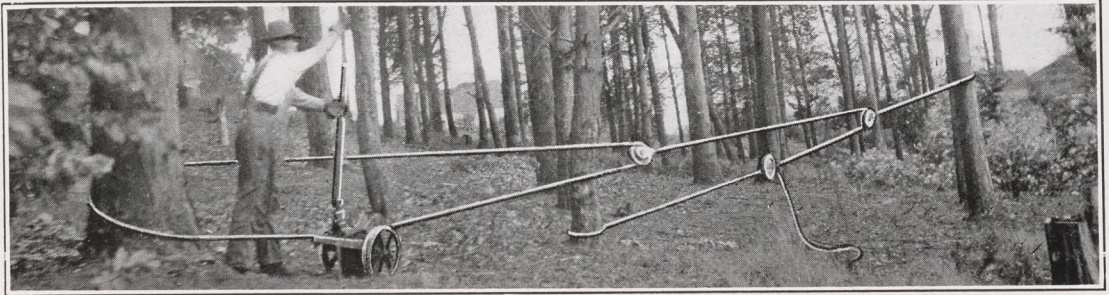
There are conditions all over the country requiring this compact power producer. It is not as powerful as some of the larger Bull Dog machines, but if your requirements come within 30 tons—the strength of a $\frac{7}{8}$ -inch cable—you cannot find a handier, lighter, quicker or cheaper machine. It is recommended especially for:

- Small stumps up to 10 inches,
- Hedges or bushes,
- Roots,
- Moving small buildings or machines,
- Hoisting.



60-TON HAND-POWER BULL DOG. PRICE \$258.00

Weight with Equipment, 580 Pounds. Code, Hansix

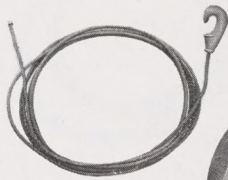
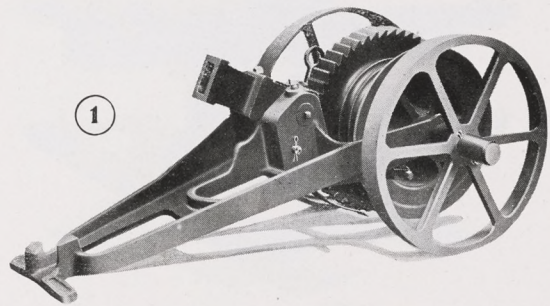


Complete 60-ton equipment in actual use

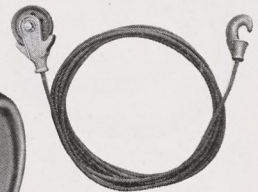
Specifications

- No. 1.** Hand-power all-steel machine, with nickel-steel shaft, tool-steel hardened ratchets, and all details the same as described elsewhere.
- No. 2.** 60-foot $\frac{3}{4}$ -inch Bull Dog steel drum line, with steel ferrule on one end and a steel hook babbitted to it on the other.
- No. 3.** 80-foot $\frac{7}{8}$ -inch Bull Dog steel cable, with hook on one end and 30-ton power pulley on the other.
- No. 4.** All-steel root hook.
- No. 5.** 14-foot $1\frac{1}{8}$ -inch Bull Dog cable, with hook on one end and 60-ton power pulley on the other.
- No. 6.** 14-foot $\frac{7}{8}$ -inch Bull Dog cable, with hook on one end and take-up on the other.

This 60-ton puller is the ideal hand-power equipment. Study the five hitches shown below. No other equipment ever produced offers such flexibility, strength and speed. It is complete—its purchase will give full satisfaction. Adapted to both trees and stumps, also any moving or lifting where you require enormous power. It will lift a loaded freight car clear off the track, pull trees up to 48 inches diameter and stumps up to 36 inches.

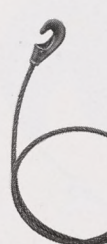


4

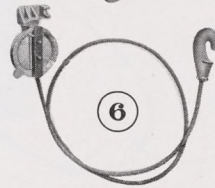


2

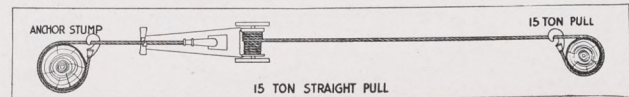
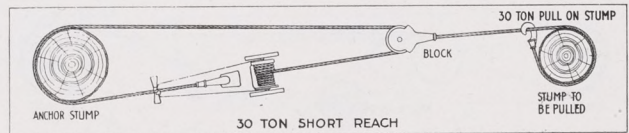
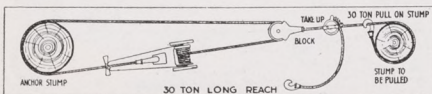
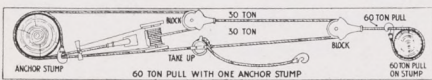
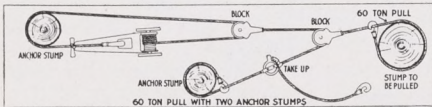
3



5

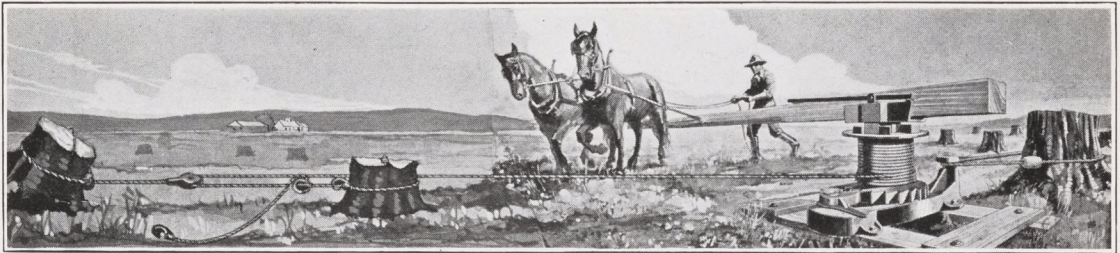


6



60-TON HORSE-POWER BULL DOG. PRICE \$258.00

Weight with Equipment, 700 Pounds. Code, Horsix



Complete 60-ton equipment in actual use

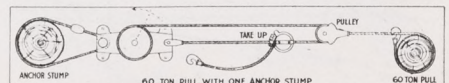
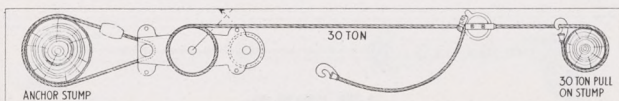
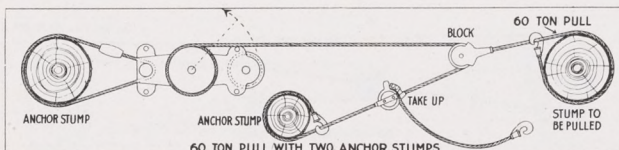
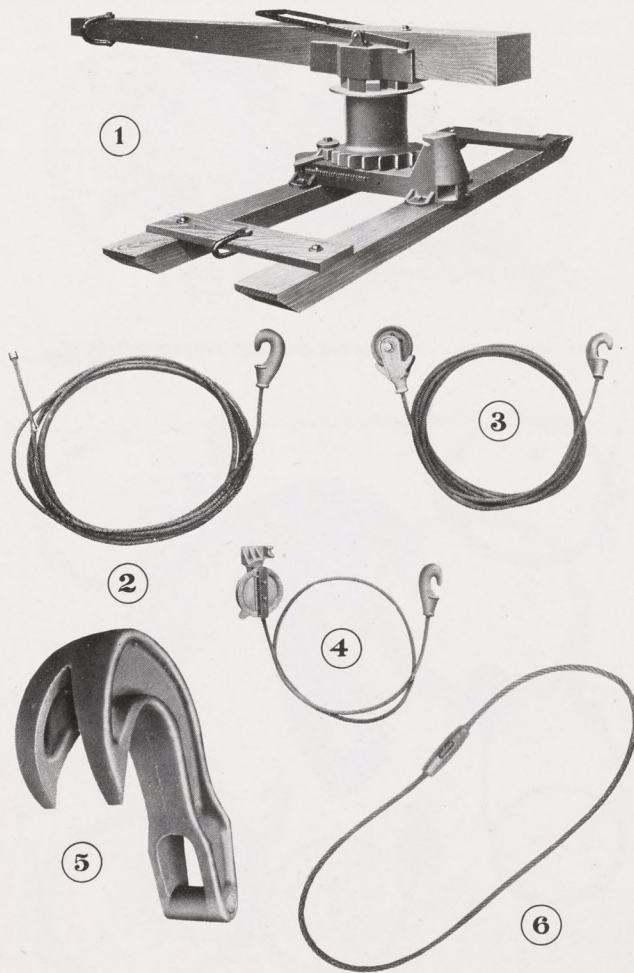
Specifications

- No. 1.** Horse-power all-steel machine, with sweep box, pulley, safety dog, etc.
- No. 2.** 150-foot $\frac{7}{8}$ -inch Bull Dog drum line, with one end fitted with a ferrule and the other fitted with a steel hook.
- No. 3.** 14-foot $1\frac{1}{4}$ -inch power cable, with 60-ton steel power pulley on one end and steel hook on the other.
- No. 4.** 14-foot $\frac{7}{8}$ -inch cable, with take-up on one end and steel hook on the other.
- No. 5.** All-steel root hook.
- No. 6.** Anchor loop made from 14-foot length of $1\frac{1}{8}$ -inch cable. Ends babbitted together in steel coupling.

This machine is particularly recommended for stumps up to 36 inches, moving houses and machinery, hoisting.

Exactly the same machine as the 90-horse-power machine, with the exception of the extra cable and pulleys. Should you want to increase the power of this machine to 90 tons, you could do so by ordering the equipment described under No. 6 on the next page.

This is a splendid outfit on moderate-sized stumps. Exceptionally fast and always dependable. It can be used both as a double and single anchor outfit, like cuts below. In this way you can quickly clear an acre with one setting. At first you extend your drum line out full 150-foot length, using two anchors, and as the work progresses and you come closer to the machine, you then attach the take-up direct to end of the machine instead of a second anchor stump and proceed same as before.



90-TON HORSE-POWER BULL DOG. PRICE \$278.00

Weight with Equipment, 800 Pounds. Code, Hornine



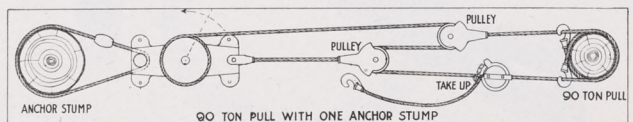
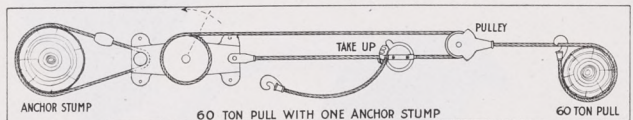
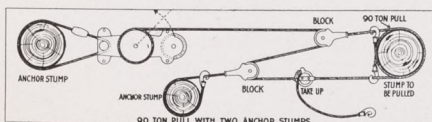
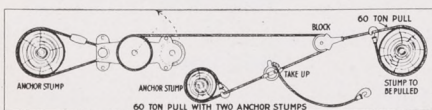
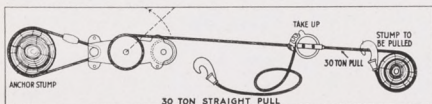
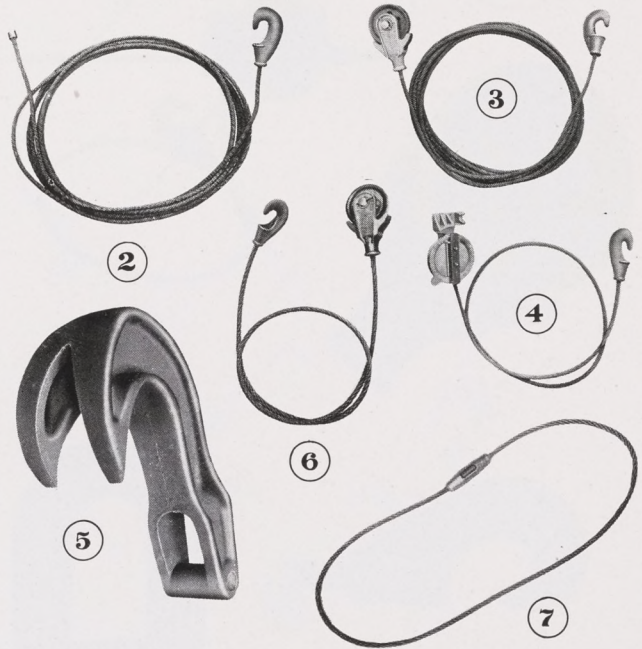
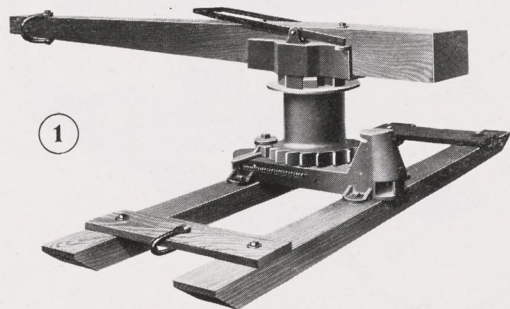
Complete 90-ton equipment in actual use

Specifications

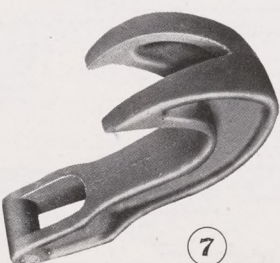
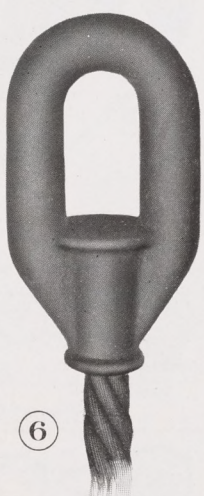
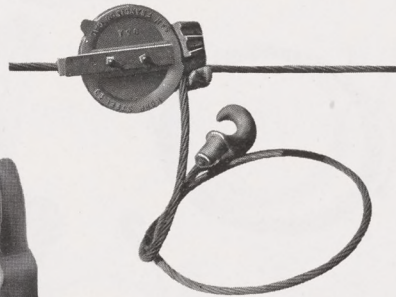
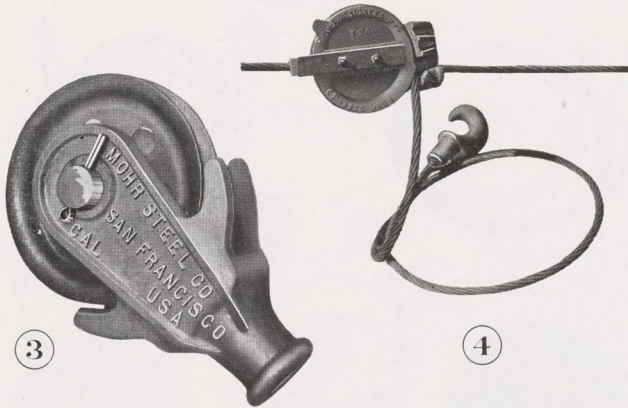
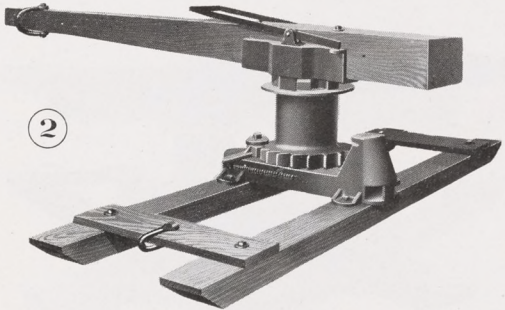
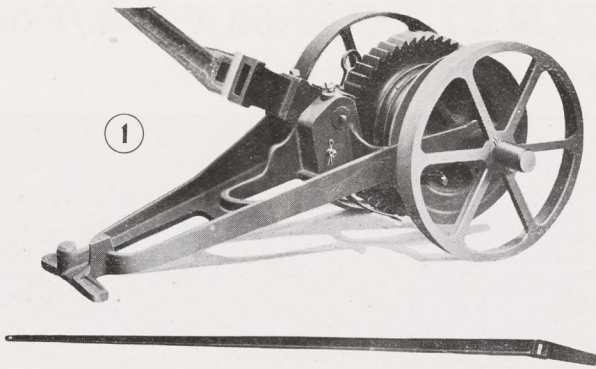
- No. 1. Horse-power all-steel machine, with boom sweep box, pulley, safety dog, etc., as described in the catalog.
- No. 2. 150-foot $\frac{7}{8}$ -inch Bull Dog drum line, with one end fitted with a ferrule and the other fitted with a steel hook.
- No. 3. 14-foot $1\frac{1}{4}$ -inch cable, with 60-ton steel power pulley on one end and steel hook on the other.
- No. 4. 14-foot $\frac{7}{8}$ -inch cable, with take-up on one end and steel hook on the other.
- No. 5. All-steel root hook.
- No. 6. 14-foot length $1\frac{1}{4}$ -inch cable, with steel power pulley on one end and steel hook on the other.
- No. 7. Anchor loop made from 14-foot length of $1\frac{1}{8}$ -inch cable. Ends babbitted together in steel coupling.

Capable of making the five hitches shown below.

This outfit is ideal for both the farmer and contractor. It is very powerful and rapid—an all-round heavy-duty machine. Equipped to be used as both a single- or double-anchor stump machine. Will clear about one acre at a single setting. Pull the stumps farthest from the machine first by using the second anchor. Then attach either the take-up for a 60-ton pull or one of the power pulleys for a 90-ton pull direct to end of machine, thus requiring only the one anchor stump to which machine is attached. (See hitches below.) This is a convenience and flexibility of great value. We strongly recommend this outfit.



BULL DOG EQUIPMENT



Bull Dog machines are furnished complete to give the number of tons specified in each case. Occasionally a customer with a 30-ton hand-power machine or a 60-ton horse-power machine wishes to get more power. This can be done by ordering the necessary additional equipment. Again, many people with other makes of machines have asked for prices on certain parts of our equipment to replace their own. To accommodate such cases we have quoted separately the following items:

No. 1. Hand-power Bull Dog machine, nickel-steel shaft and tool-steel ratchets\$125.00
Code, *Hanmash*

No. 2. Horse-driven Bull Dog machine\$125.00
Code, *Hormash*

No. 3. 60-ton all-steel block, steel shaft, oil pocket, cable guide, for 1¼-inch cable*\$20.00
Code, *Pulsix*

30-ton all-steel block, steel shaft, oil pocket, for ¾ and 1-inch cable ...\$18.00
Code, *Pulthre*

No. 4. Steel take-up for ¾ and 1-inch cable\$18.00
Code, *Takeup*

No. 5. 60-ton steel hook for 1¼-inch cable\$6.00
Code, *Hoksix*

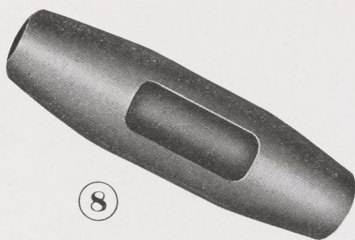
30-ton steel hook for ¾ and 1-inch cable\$5.00
Code, *Hokthre*

15-ton steel hook for ¾-inch cable, \$4.00
Code, *Hokie*

No. 6. 30-ton loop for ¾ and 1-inch cable\$4.00
Code, *Loop*

No. 7. Steel root hook\$15.00
Code, *Root*

BULL DOG EQUIPMENT



8

No. 8. Anchor cable coupling for $\frac{7}{8}$ and 1-inch cable\$4.00
Code, *Coup*

No. 9. Cable—

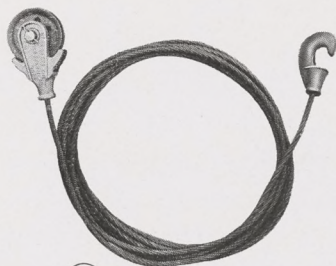
Diameter	Strength in tons	Price per foot
$\frac{5}{8}$ -inch.....	19	\$0.22
$\frac{3}{4}$ -inch.....	26	.30
$\frac{7}{8}$ -inch.....	35	.40
1 -inch.....	45	.50
$1\frac{1}{8}$ -inch.....	55	.60
$1\frac{1}{4}$ -inch.....	70	.75



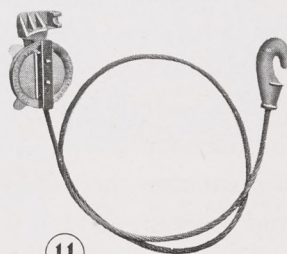
9

No. 10. Power or Choker Cable—

30-ton power pulley, with 14 feet $\frac{7}{8}$ -inch cable and steel hook.....\$22.00
60-ton power pulley, with 14 feet $1\frac{1}{4}$ -inch cable and steel hook.....\$29.00



10



11

No. 11. Take-up or Grab with Cable—

20-ton take-up, with 14 feet $\frac{3}{4}$ -inch cable and steel hook\$25.00
30-ton take-up, with 14 feet $\frac{7}{8}$ -inch cable and steel hook\$28.00
40-ton take-up, with 14 feet 1-inch cable and steel hook\$30.00



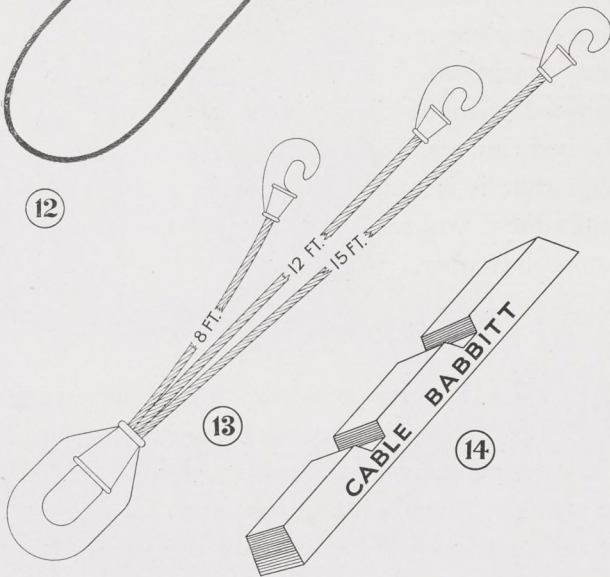
12

No. 12. Anchor Cable—

Anchor loop from $\frac{7}{8}$ -inch cable...\$12.00
Anchor loop from 1-inch cable... 13.50
Anchor loop from $1\frac{1}{8}$ -inch cable. 15.00
Anchor loop from $1\frac{1}{4}$ -inch cable. 17.00

No. 13. Bull Dog Cable Clusters—

Three cables, $\frac{1}{2}$ -inch diameter...\$16.00
Code, *Cluster*
Three cables, $\frac{5}{8}$ -inch diameter... 18.00
Code, *Clusteroid*

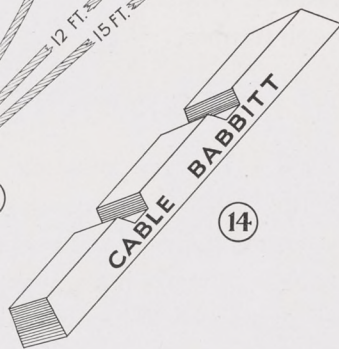


13

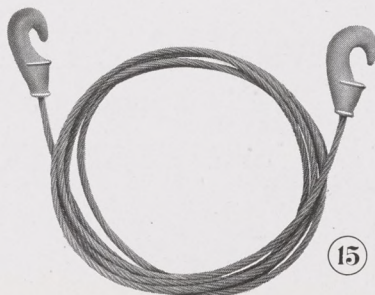
No. 14. Babbitt, per pound\$0.20

No. 15. Cables to lengthen drum cable or anchor loop—

14-foot $\frac{7}{8}$ -inch cable with 2 hooks, \$18.00
Code, *First*
20-foot $\frac{7}{8}$ -inch cable with 2 hooks, 20.00
Code, *Second*
40-foot $\frac{7}{8}$ -inch cable with 2 hooks, 30.00
Code, *Third*
80-foot $\frac{7}{8}$ -inch cable with 2 hooks, 60.00
Code, *Fourth*
14-foot 1-inch cable with 2 hooks... 19.00
Code, *Fifth*
20-foot 1-inch cable with 2 hooks . 23.00
Code, *Sixth*



14



15

HOW TO ORDER

THE order blank which goes with this folder will help you in making out your order. Fill it in as indicated. The machine is shipped to you by freight.

We are doing a cash business. With your order you should send us a check, draft or money order (post-office or express) for the amount named as the price of the machine you wish to get. Or, if it is more convenient for you, send us \$25.00 with your order, to cover the cost to us of shipping the machine, and pay the rest of the money to your freight agent when he delivers you the machine. We are doing a cash business in order to keep our price as low as possible. A credit business always makes the product more expensive, and we want to save you this money.

Upon receipt of your order the machine will be immediately shipped. It comes to you complete and ready for work, with one exception. The horse machine is shipped without the wooden beam and the bed timbers. The freight on them is so high that it is much cheaper for you to make them yourselves out of tree trunks or rough lumber.

GUARANTEE

BEHIND every machine which we ship stands our business reputation and a signed personal guarantee made out to you. You already have a specimen form of this guarantee. When we ship you your machine we send one made out to you

personally. It guarantees the machine against defect for three years. If the machine proves to be in any way different from what we have claimed, we will give you a new machine. Certainly nothing could be fairer than that. We have a good machine in the Bull Dog and we are ready to stand behind it in every way.

EXCHANGE POLICY

IN addition to our guarantee, we have a very liberal exchange policy. You may move to a new location and be up against a different kind of stumps. Conditions may change. Let us know if this happens. Our exchange policy is fair and square, and will enable you to make the change without losing money.

OUR FINAL WORD

THIS brings us to our final word. We want you to get the machine most suited to your needs. Read the catalog carefully, and think about the whole matter before making your decision. We have tried to make plain the difference between the horse machine and the hand machine. We have tried to show you just why the Bull Dog *is* a "new and better machine." Go over in your mind your particular problem. If you have any doubts, write us. That's what we're here for. And after you have decided what type of machine best fits your needs, send us your order. We will fill it promptly and to the best of our ability.

MOHR STEEL COMPANY

2805-2861 26TH STREET

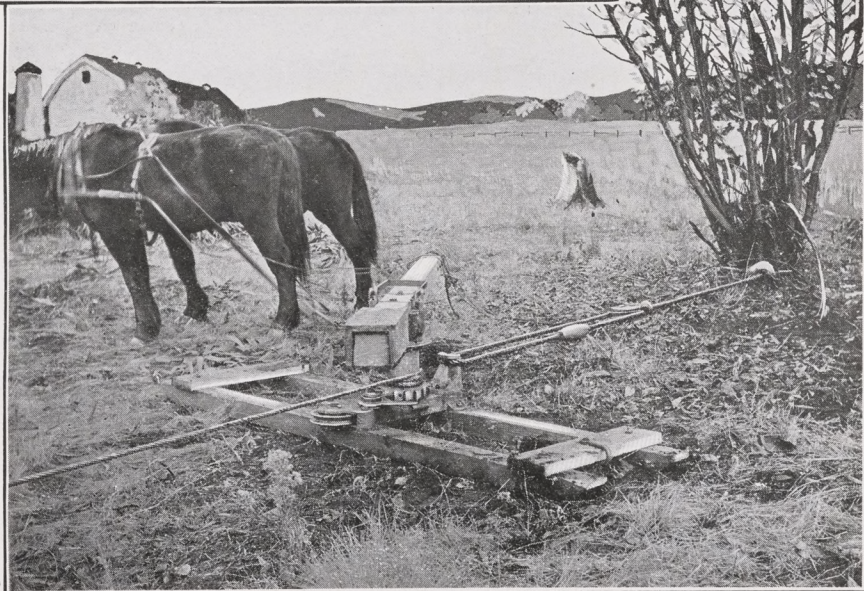
SAN FRANCISCO-CALIFORNIA



There's a feeling of satisfaction when you've finished a big day's work with the Bull Dog. Something accomplished. If you use a Bull Dog there will be no feeling when evening comes that the day has been wasted in useless effort

Ed Campbell, of Graton, California, has been pulling stumps all his life. He thinks that the Bull Dog is the best machine that he has ever seen. Read what he says about the Bull Dog in his letter on page 15

A "close-up" of the Bull Dog ripping out a 34-inch eucalyptus tree. Note how level the machine rests on the ground. No tilting or tipping. Simplicity throughout. The Bull Dog has fewer parts, larger bearings, than any machine in the field. Here the anchor loop has been extended by using one of the power pulleys with its fourteen feet of cable, thus allowing the team to pass between the anchor tree and the machine. One of the many combinations obtainable with this machine





BULL DOG
a new and better
STUMP PULLER
Hand and Horse Power