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## Gatling Gun

dnalot · ① Sep 30, 2019



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Sep 30, 2019

#1



**dnalot**

Project of the Month  
Winner !!!

HMEM Supporter

Joined: Jan 29, 2013  
Messages: 684  
Reaction score: 997  
Location: Mossyrock Washington

A little while back I mentioned in a post that I was working on a Gatling gun. I was asked to post photos but declined thinking it would be considered off subject. A moderator "Kvom" advised that a Gatling gun post was acceptable, so I posted a few photos of the project in progress without any complaints. The project is now complete and I would like to present it here.

The American ATF does not consider the Gatling as a machine gun as each shot is loaded cocked and fired mechanically by hand. Replace the crank handle with a motor and you get a room at the gray-bar motel.

I bought both the DE Gatling plans and the RG-G Gatling gun plans. I went with the RG-G plans because the action closely resembled the original gun. I built the action closely to the plans but deviated from them on much of the rest of the build. The RG-G plans do not look much like the original and it was in this area that I made changes. The RG-G plans include a plan for a Tripod mount and a Carriage mount. I had photos of a rare navel mount and so I went with that because it will take up less space on the display shelf.

Making the parts was fairly straight forward without any really complicated parts to make. The devil was in how close tolerance the action needs to be if you want it to function well. The other challenge is that most of the action can not be viewed. I probably assembled and disassembled this thing a couple hundred times fitting all the parts. I don't like taking time off from a project but I needed to do just that several times during the build. Tedious. Start to completion was 2 years. I took some really long breaks.

The one item that doesn't scale well is the force required to fire the round. It takes about the same amount of force to fire a rim-fire .22 as it does a center-fire 45-70. The torque needed to rotate the moving parts is slight but pulling the firing pin's spring back is very noticeable.

Working order of the mechanism:

Viewed from rear rotation is clockwise. Top center barrel ~ receive round from the gravity magazine, as the gun rotates the round will be pushed into the chamber by the bolt while the firing pin is held back. By the time the barrel has reached the bottom the round will be chambered, bolt locked and the firing pin will be released. BANG. As the barrel moves upward the bolt retracts and the spent brass is extracted and ejected about  $\frac{3}{4}$  of the way up to the top starting point. One full crank to load and fire first round, four cranks to fire twenty rounds and another crank to eject the last of the brass. Best speed is about 300 rounds a minute, assuming you have the magazines and someone to load.

Overall I am pleased with how it turned out and how reliable it is. It's easily as reliable as the original, unfortunately that's not saying much. And like the original, cleaning after use is a lot of work. It is fun to shoot and its firing cadence attracts a lot of attention at the shooting range.

Model is a half scale 1874-(sorta) Gatling gun.

Short barrel version: nicknamed a "Camel Gun".

The nickname came about due to a Colt Advertisement showing the gun mounted to a Camel's saddle horn. The barrels were shortened to save weight.

Weight: 24.5 pounds.

Length Overall: 22.5 inches

Barrel Length: 13 inches

Caliber: .22LR

Magazine capacity: 20

The original model fired a 45-70 round. Colt and others built Gatling's guns in many calibers for a variety of customers around the world. I don't think any were ever mounted to a Camel. Probably difficult to train them to keep their heads down.



[View attachment 111454](#) [View attachment 111455](#) [View attachment 111456](#)





I will make several posts of photos of the completed gun and some of internal parts. This may take some time as I live in the country and my connection is verrrrry sloooow. And yes the gun is looking a bit dirty, I'm letting it get a little sweaty looking.

~ I will be starting a new engine project very soon, something a little more suited to this Forum. And this time I will post photos as the project progresses. ~

R Degen, Rlx5513, Brian Hein and 3 others

Sep 30, 2019



**dnalot**  
Project of the Month  
Winner III

Winner III

HMEM Supporter

Joined: Jan 29, 2013

Messages: 684  
Reaction score: 997

Reaction score: 557

Had some problems loading photos, will try again

#2





Rlx5513 and Robert Ritchie

Sep 30, 2019

#3



Detail of Cam that moves the bolts

**dnalot**

Project of the Month  
Winner !!!

HMEM Supporter

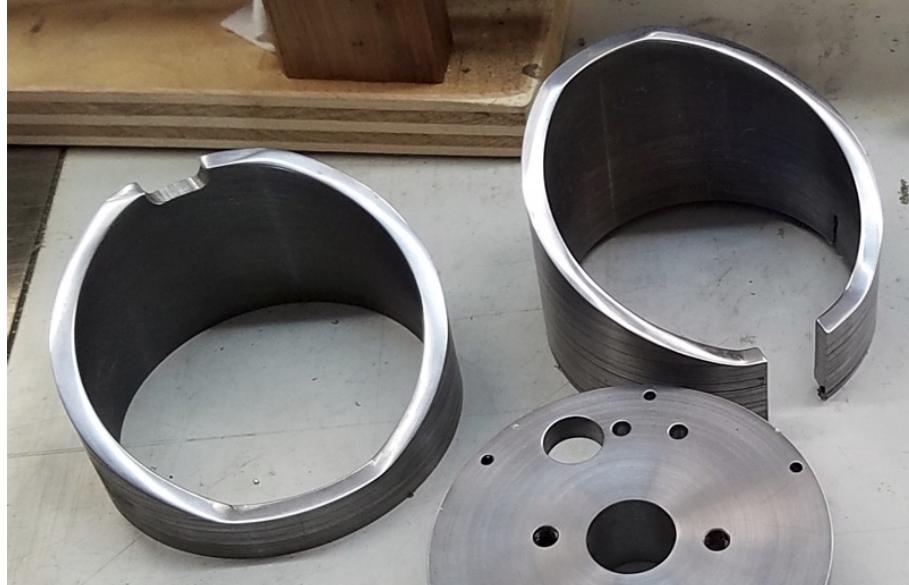
Joined: Jan 29, 2013

Messages: 684

Reaction score: 997

Location:

Mossyrock Washington



Robert Ritchie

Sep 30, 2019

#4



dnalot

Project of the Month  
Winner !!!

HMEM Supporter

Joined: Jan 29, 2013  
Messages: 684  
Reaction score: 997  
Location:  
Mossyrock Washington

Detail of parts that retract the firing pins. The small movable part captures the cocking screw in one position, pulling the hammer back, or allows the bolt to move forward without cocking. The horn on the larger part will support (lock) the bolt in the firing position. These parts are shown in their rough condition, they were well polished before final assembly.





Sep 30, 2019



dnalot

Project of the Month  
Winner !!!

## Bolts



Sep 30, 2019

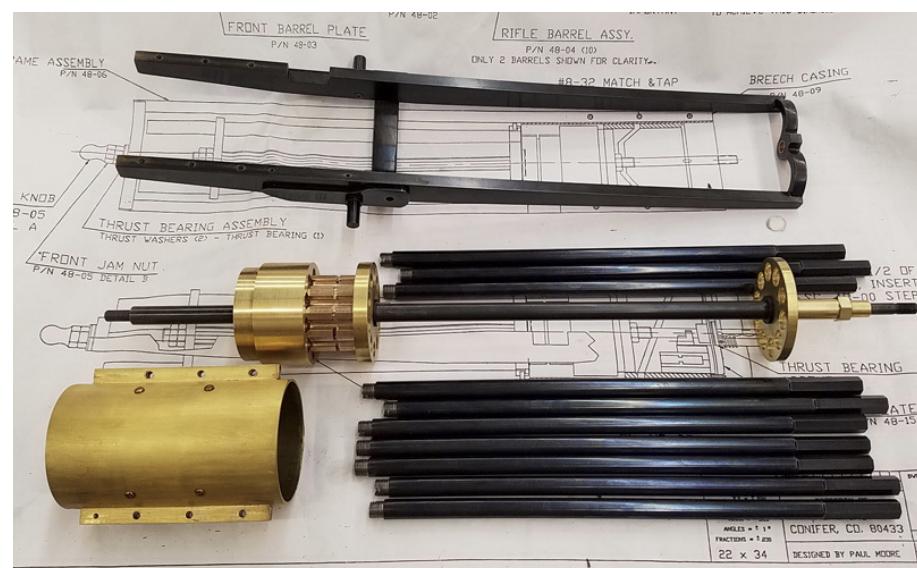
**dnalot**Project of the Month  
Winner !!!

HMEM Supporter

Joined: Jan 29, 2013  
 Messages: 684  
 Reaction score: 997  
 Location:  
 Mossyrock Washington



#6



OK finally got a handle on how to post photos. Promise I will do better next time.

Here are some links to my past engine postings

Snow Engine <https://www.homemodelenginemachinist.com/threads/snow-engine.25549/>

Minnie Traction Engine <https://www.homemodelenginemachinist.com/threads/1-75%C2%94-minnie-traction-engine.24759/>

Clayton Steam Wagon <https://www.homemodelenginemachinist.com/threads/clayton-steam-wagon-completed.24419/>

Bottle Engine <https://www.homemodelenginemachinist.com/threads/bottle-engine-completed.22722/>

My first engine <https://www.homemodelenginemachinist.com/threads/45cc-marine-steam-engine.21317/>

Mark T

Henry, kvom, brotherbear and 5 others

Sep 30, 2019

Fantastic work! This is the sort of project I'd like to have a go at myself but unfortunately where I live I'd be arrested as soon as I completed the first part so it's never going to happen.



**Cogsey**  
Well-Known Member  
Joined: Jul 30, 2012  
Messages: 2,946  
Reaction score: 888  
Location:  
Perth, Western Australia

G54AUST

Sep 30, 2019

Excellent work very impressive !

**R**

**retailer**  
Junior Member  
Joined: Oct 13, 2011  
Messages: 163  
Reaction score: 59

Oct 1, 2019

I've just youtubed stalked your videos hoping to see this in action - I'm very impressed with your projects.  
Brilliant work.



**VINCENT INGRAM**  
New Member  
Joined: Apr 5, 2019  
Messages: 3  
Reaction score: 1  
Location:  
Auckland, New Zealand

Oct 1, 2019

o yer you no we ALL want one , very very nice work

**T**

**Tim1974**  
Well-Known Member  
Joined: Feb 16, 2016  
Messages: 87  
Reaction score: 15

Oct 1, 2019

The price of the brass alone looks daunting!



**a41capt**  
Well-Known Member  
Joined: Jun 5, 2009  
Messages: 297  
Reaction score: 113  
Location:  
Camp Verde, Arizona USA

Excellent work, I've toyed with the idea of doing one myself (I've got a box with twenty 16" .22LR barrels in it I bought at a yard sale), but I'm not so sure the boss would appreciate me spending a good part of her grocery money on the materials.

Beautiful piece of work, and if you post a link to any video of shooting it I, as well as most others, would be most appreciative.

John W

Oct 1, 2019



**IceFyre13th**  
Well-Known Member  
Joined: Oct 22, 2015  
Messages: 57  
Reaction score: 13

Post the link to the video, please!!!!

Beautiful work!!!

#12

Oct 2, 2019



**stragemmitsuko**  
Well-Known Member  
Joined: Jan 19, 2016  
Messages: 291  
Reaction score: 108

beautiful work , a gatling is high on my "when i'm retired list".  
Would love to build one , but I fear it will be beyond what i'm capable of .  
Pat

#13

Oct 2, 2019



**harborfreight8x**  
**12**  
Active Member  
Joined: Oct 29, 2010  
Messages: 29  
Reaction score: 7

Beautiful, you have awesome engineering and machining skills.

#14

Oct 2, 2019



**Ken I**  
Project of the Month  
Winner!!!  
Project of the  
Month Winner  
Joined: Oct 31, 2010  
Messages: 1,650  
Reaction score: 413  
Location:  
Cape Town, South  
Africa

Never mind that it's not an engine - it's awesome workmanship and I'm so pleased you posted this.  
I've also been toying with the idea of making one - need to check local regulations - which I'm pretty sure won't allow it.  
Drool.....

Regards. Ken

#15

Oct 2, 2019

**B**

**burkLane**  
Active Member  
Joined: Dec 31, 2015  
Messages: 26  
Reaction score: 18

Excellent Work!  
I noticed the Plan Title box shows Conifer, Co. in address. Had to look at his site, turns out he lives just south of me.

#16

Oct 3, 2019



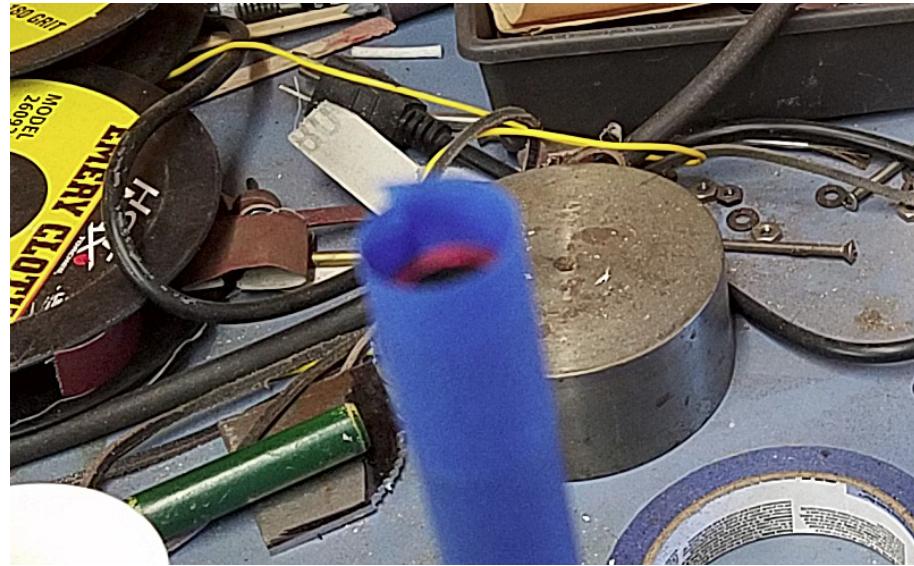
**dnlot**  
Project of the Month  
Winner !!!  
HMEM Supporter  
Joined: Jan 29, 2013  
Messages: 684

Thanks for the comments guys. I will work on making a video soon. Right now I'm struggling to breathe with a bad chest cold. Going to need to find a different camera. My phone's camera goes mute after the first bang.

#17



Mark



kvom and Robert Ritchie

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