TECHNOLOGY & WEAPONRY

Upton Abbey: An Improvised Comedy of English Manors

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INTRODUCTION

World War One was a time of great technological advancement. New technology on the battlefield changed the way that wars were fought, and created casualties the world had never seen before. Weaponry, communication, transportation, and reconnaissance were all revolutionized. Back on the estate, technology was moving forward as well. Most of the advances back home came before the war, but these new technologies made life much easier and made many time-costly rituals of the past obsolete. In this document, technology both on the estate and on the battlefield will be explored, as well as its impact on daily life.

At War

WEAPONRY

Weaponry became much more mechanized and standardized in WWI. The weapons developed for this war caused more casualties in a shorter period of time in the history of warfare up to that point. "The Great War", as it was called at the time, left 21.2 million wounded, 8.5 million dead, and 7.7 million missing. This made a grand total of 37.5 million casualties out of the 65 million that were serving, or 57.5%[1] (PBS).

This was the first war where mechanized, standardized rifles (with a bayonet attached) were issued to each soldier, instead of rifles that required gunpowder. (Brown) These new rifles left little room for error and ensured a faster, more deadly weapon that could be uniform among all soldiers.

COMMUNICATION

Communication during the war was difficult. New communication technology was starting to emerge, but the old forms of communication were still being used. Some common forms of communication included despatch riders, carrier pigeons, telephones, and wireless telegraphy. Telephones and telegraph wires were the most common forms of communication for the British Army because of their speed. Mostly used to communicate between the front lines and commanders, both telephones and telegraphs used lines that were frequently damaged and destroyed by artillery. These forms of communication were also easily intercepted by the German forces (Bruton). Communication with home was done through the mail, which was painstakingly maintained in order to keep morale up (Brown).

[1] For the complete table broken down by country, go to https://www.pbs.org/greatwar/resources/casdeath_pop.html

TRANSPORTATION

The main modes of transportation through the war were ships, trains, and horse-drawn wagons. Motor cars were also used to the greatest of their extent, but because of their speed and constant need for repair and maintenance, they were not a primary source of transportation. Nearly all people and goods were brought to France from England by coal-powered ships. At the start of the war, the British owned 45% of the world's merchant ships, around 10,000 ships (Brown). Trains carried most goods by land.

At Home

ELECTRICITY

Electric lights were introduced to Highclere Castle in 1896. Before this, lamp-men had a nightly routine of walking around the house and lighting over 100 oil lamps (Carnarvon 77). Electricity slowly moved from powering lights to powering appliances all across the estate, making life easier and more modern.

RUNNING WATER

Running water was introduced to Highclere Castle in 1896. This added water closets to the estate as well as making cooking and bathing much easier. Before this addition to the estate, housemaids had to carry buckets of hot water up from downstairs and fill up free-standing tubs every time someone wanted to bathe (Carnarvon 77). This would have also provided them with hot water. However, some of the older characters would still have enjoyed a bath drawn by hand, if that was their preference.

BELL BOARD

Located downstairs was a huge bell board, with 66 different bells. Each bell corresponded with a different room in the estate. These bells could be rung by pulling a chord in the corresponding room, and the corresponding servant would respond. Because there were so many servants who were all in different places at different times, there was a Steward's room boy who was paid to watch the bell board and notify a servant if their bell rang (Carnarvon 56). Below are two bell boards: On the right the real bell board still standing at Highclere Castle, the same today as it was 100 years ago; and on the left the fictional bell board from Downton Abbey.

TELEPHONE

Before 1914, very few people had telephone lines outside of the estate. The earliest telephones present in large estates were to communicate with those within the estate, much like a bell board (Palmer). In war time however, it would have been very important for the estate to have a telephone to communicate with the outside world. With the phone they could place calls to and receive calls from London. However, it would not have been possible to communicate much farther than that.

KITCHEN

The most prominent feature of the kitchen was its heat. There was a huge stove and six or seven ovens, all powered by coal. The ovens and stove had to be heated for every meal. In the end, only 3% of the coals heat went to warming the food and only 7% heated hot water. 35% was absorbed by the brick, 25% went out the flue, and 30% heated the kitchen year round (Fellowes 186).

Kitchen appliances included: stew pans, preserving pans, fish kettles, salmon kettles, turbot kettles, and moulds of all shapes and sizes. In addition was an array of pots, pans, plates, and all the cooking ware they could possibly need. Most was made out of copper, which the scullery maid would keep polished.

MOTOR CAR

The Motor Car was just one of the many moving pieces of the estate that required it's own world to maintain. It lived in it's own house, the motor house, which is equivalent to a garage today. It had it's own servant, the chauffeur, who maintained the car and it's home in every aspect. The chauffeur had to be a mechanic with expansive knowlege of automobiles. At that time motor cars needed constant repairs

and maintenance. Chauffeurs frequently considered themselves gifted artisans instead of servants because of their expansive knowledge and tireless upkeep of the vehicle. If another servant disliked a chauffeur they would call him a ‘shuvver’ and hook their thumbs into the armholes of their waistcoats as an insult.

MISC

- The House was built before central heating, so nearly every room in the house would have a fireplace.
- Wine and beer was kept in a wine and beer cellar.
- Silver was kept in a safe when it was not being used, and the butler held the key.
- The Housekeeper had a sewing machine.
- In case of fire there were canvas tunnels that could be attached to the windows of the higher floors. They would attach to the windows with metal hooks and the other end would be held by men standing outside. When sliding down the canvas tunnels, you would have to tuck your elbows in so they didn’t get caught on the metal hoops (Carnarvon 58).
- There would have been two giant clocks downstairs to help the servants stay on time. One in the kitchen, and one in the servant’s hall.
- Other downstairs rooms included: a stillroom for making cakes, jams, and breakfast trays; a scullery for washing; a washroom; a flower room; a room to iron the newspaper; a housemaid’s closet to store brushes and pails; and a brushing room for brushing muddy clothes.
- To avoid confusion, the names of guests would be written on cards and place on a brass holder on their bedroom door.
- Coal and other fuel was very cheap at the time, so the whole house would have been very warm year round.

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