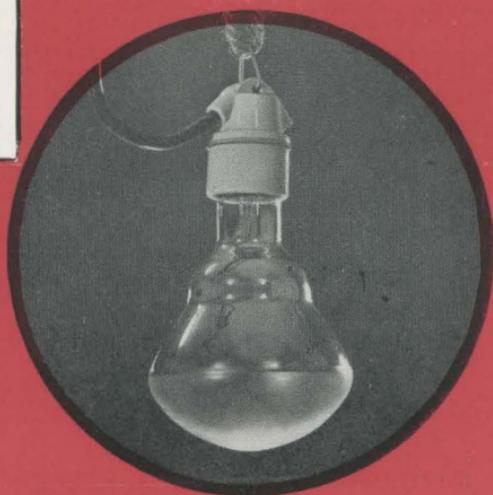


Radiant **HEAT**



WITH THE

INFRA-RED

LAMP

The use of Infra-Red lamps to supply needed warmth to young livestock is well-known and particularly suited to this purpose. It is flexible, safe and cheap to use. It promotes health and growth in a special way which no farmer can afford to ignore.

Radiant HEAT

for EASY REARING

NEED FOR EXTRA HEATING :

When winter is challenged by the stockbreeder, he has to be on his guard at once against losses. So much do his profits depend on keeping young stock alive in the first days and weeks of life that care, expense and labour are never stinted. Artificial heat in some form or other must be supplied. Food is to be used only for growth and development; and not to maintain heat in cold, damp and draughty surroundings.

THE CASE FOR INFRA-RED LAMPS :

Infra-Red lamps score over all other forms of heating because they actually inject heat into a body without heating the surrounding air. Draughts are cut down to a minimum; and animals and birds relax and thrive in a pool of infra-red heat which penetrates their bodies.

THE NATURE OF INFRA-RED HEATING :

Infra-red rays behave in exactly the same way as light rays. The rays can be concentrated at the source and accurately reflected from a shining, non-absorbent surface. Infra-red rays bounce back in the same way as light is reflected from a mirror. The reflector is built into the inner surface of the heat lamp as a silvered layer. This silvered deposit is free from tarnishing, as it is protected from the air during the life of the lamp.

INSTALLATIONS :

An Infra-red lamp should never be plugged into a socket or adaptor. Wherever an infra-red lamp is to be used there must be a suitable screw thread lampholder with shroud already in place, with permanent wiring running back to a switch. The lampholder is to be supported by a rope or chain which takes the weight of the lamp and shield when fitted. To keep the flex off the ground it is tied or clipped to the supporting rope. (An ordinary clothes peg is quite good enough for this purpose.)

The Area Electrician of the E.S.B. should be asked to inspect all extensions planned for the use of infra-red lamps. He will check that the phase wire of the flex connects with the centre pin of the lampholder and not with the screw cap. In this way there is no risk of shock when screwing in a bulb.

A suitable shield should be fitted with each lampholder to prevent water from dripping on to the lamp. The lamp should be suspended in such a way as to allow easy raising or lowering.

VERSATILITY OF INFRA-RED :

Apart from its use with farm animals, many other applications of infra-red heating are strongly recommended for houses and out-buildings as well as for business and factory premises in rural areas.

INFRA-RED IN OUT-BUILDINGS AND IN THE HOME :

Wherever heat is needed for a short time over a fixed point, infra-red lamps are ideal. What is wanted is a source of heat to direct warmth on to the worker, with no fuel or money wasted by sending heat out of doors and windows.

It is the same inside the house. An infra-red lamp may be used wherever localised heat is needed for occasional work.

INFRA-RED FOR VILLAGES, STORES AND FACTORIES :

As with the individual farm, so with shops, stores, garages, factories and industries wherever rural electrification has spread. In countless places infra-red lamps give accurately directed and economic heat over limited working spaces. Because of their special penetrating power they are particularly useful for drying. They may be used in garages, in wood-working, cabinet making and the manufacture of toys.

INFRA-RED LAMPS AND CHICKEN BROODING :

One hundred chicks can be reared under one 250 watt lamp. The heat may be switched off for varying periods in warmer weather. The average figure for electricity consumption works out at one unit per chick. Where two or three lamps are used they should be spaced 26 inches or so apart.

To begin with, the lamp or lamps may be hung 18" above ground level, and raised 2" every 7 days until a height of 22" is reached. The chicks will move in and out of the heated area from the edge of a draught-proof circular corrugated cardboard screen. This screen encloses a circle somewhat larger than the Infra-red pool; it may be 12" high and can be widened daily until its use can be discontinued.

The screen protects from ground draughts during the first week. Food and water are placed inside it out of the range of the lamp. The chicks are induced to move around while they look for food and they become hardy and active. Feathering is extremely rapid with all young poultry.

It is a simple matter to decide if the chicks are getting enough heat. When they are comfortable they move about freely. When they are cold, they huddle together; and some of them may be crushed.

Provide adequate minerals in the diet. Young poultry grow so quickly under infra-red rays that they need more minerals for increased bone formation. It must be remembered that all food is being used for growth, and that the extra growth needs extra mineral salts.

TURKEYS, DUCKLINGS, GOSLINGS :

With ducklings and goslings, progress is even more remarkable under infra-red than with chicks. A dosage for three weeks instead of five weeks is called for. However, one standard 250 watt lamp will deal adequately with 40 goslings or 50 ducklings.

Turkey poult really need the warmth and pure, still air of an infra-red house. These delicate but very profitable birds can be raised at the rate of 40 for each standard 250 watt lamp in complete safety.

PIG REARING :

When infra-red lamps are used in pig-pens they should be put to use a day or two before farrowing time. When they are placed over the sow, she quickly becomes relaxed and comfortable and farrowing is easier.

The lamps are moved to their final position over the bonhams' creep as soon as the first piglet is born. As each pig is born, it is placed in the creep at once. The young pigs are put to the mother for the first feed and guided back to the warmed creep. This forms the pattern of the feeding routine which the bonhams will follow. As they grow stronger, they will wander around the pen, gaining strength and hardiness before they return to the lamps. They take an increasing amount of exercise, moving from warm to cooler surroundings at will. A guide for the position of the lamps is that the back of the hand, held at the level of a young pig's back, should be pleasantly warm.

Apart from safeguarding life, growth is increased, since more use is made of food for this purpose. Up to 30% gain in weight is secured by the use of infra-red lamps.

Well grown pigs approaching baconer size put on a spurt under infra-red lamps, particularly in cold weather.

FLEXIBLE SAFE

and ECONOMICAL

OTHER USES FOR LIVESTOCK :

An assembly of two lamps for pig rearing can be used equally well on lambs, greyhound pups or calves, or in the treatment of any animal which may be ill or may have been pulled out from a ditch—as happens only too frequently in this country. Infra-red heat assists rearing of collies, show dogs and pets in the same way as for pigs and sheep.

PERFORMANCE AND ADVANTAGES OF

INFRA-RED LAMPS

Infra-red lamps have a life exceeding 5,000 hours. The filament glows at a much lower temperature than that in incandescent lamps. This diminishes the wear due to excessive heat stresses.

Apart from their long operating life, infra-red heating lamps show many other valuable advantages.

1. The heat is easily adjusted : Simply raise or lower the lamp.
2. The heat is uniform : Independent of air temperature, the same amount of radiant heat is driven into young animals.
3. The heat is of high quality : No draught, fumes or extremes of temperature.
4. The heat is selective : Heat is directed to and absorbed by the animals and their bedding.
5. The heat is instantly available : Just switch on or off.
6. Infra-red lamps are simple to instal : They save space—in fact they occupy no working space at all.
7. They are cheap to run : 4 hours on one unit of electricity.
8. They save feeding costs : Food is used immediately to form flesh and bone.
9. They are safe.

PRICES :

250 watt clear glass bulbs ...	15/6d. each
250 watt red lined bulbs ...	17/-d. each
Porcelain lamp holder ...	3/-d. each
Bakelite lamp holder ...	2/8d. each

Prices (February 1955) are subject to confirmation at time of placing order.

*Issued
by the*

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