W. Crosskill begs respectfully to inform the Agricultural Public, that the validity of his Patent, and the novelty and usefulness of the Machine, have been established by several cases determined in the Court of Chancery, and especially by the case of Crosskill v Groundsell, tried at Liverpool, before Mr. Justice Cresswell, and a Special Jury, (where a new trial was refused by the Court of Exchequer, on the application of the Defendant.) And by the case of Crosskill v Tuxford and others, which occupied the attention of the Court of Common Pleas, and a Special Jury of the City of London for nearly two days, (see "The Times" Newspaper for February 26th, 1846.)

An action has also been brought against Mr. Maltby, of Louth Park, for purchasing a pirated Clod Crusher, and £50 recovered of him for damages and costs. Various other parties have paid damages and costs, and signed written apologies, to avoid the unpleasantness and expense of a public exposure in the Court of Chancery.

#### CAUTION-TEN POUNDS REWARD

is offered to any person who shall give the Patentee such information as shall lead to the conviction of any person, making, selling, or using the Patent Clod Crusher, without licence from the Patentee.

## WILLIAM CROSSKILL, BEVERLEY IRON WORKS,

#### NEAR HULL, YORKSHIRE,

BEGS TO SUBMIT TO THE AGRICULTURAL PUBLIC THIS COPY
OF THE

#### PRACTICAL OPINIONS

ON THE EFFECT OF

## CROSSKILL'S PATENT CLOD CRUSHER,

From the Journal of the Royal Agricultural Society of England, for 1843, vol. 4, part 2nd, pages 460 to 581.

The original Letters, with a Model of the Roller, are deposited in the Museum of the Royal Agricultural Society, 12, Hanover Square, London.

A Model of the Roller is also exhibited at the Royal Polytechnic Institution, London.

The Clod Crusher Roller consists of 23 Roller-parts, with serrated and uneven surfaces, placed upon a round axle, 6 feet wide by 2½ feet in diameter. The Roller-parts act independent of each other upon the Axle, thus producing a self-cleaning movement. Of course the Roller must only be used when the Land is so dry as not to stick. In fitting up the Patent Roller, care must be taken to place the large hole Roller-parts alternately with the smaller hole Roller-parts; and that each Roller-part be put on the Axle with the Arrow on its face pointing to the Horses.

When taken to the Field, a hole is dug under each travelling wheel, until the Roller-parts rest upon the ground, then take off the road wheels; use the same method to get them on when required.

Cash Price, with Travelling Wheels complete, delivered in Hull:
6 feet 6 inches.....£21. 6 feet.....£19 10s. 5 feet 6 inches.....£18.

# CROSSKILL'S PATENT CLOD CRUSHER ROLLER.

The following Extract is from the Journal of the Royal Agricultural Society. Find. 1, page 372.

"CLOD CRUSHERS.—Several Clod Crushers, and Rollers, or implements o which that appellation was given by their makers, were put to work at Mr. Spooner's farm, on land well prepared for testing their respective properties and merits. The remarks made in the report of the Derby neeting relative to Mr. Crosskill's implement were fully borne out by the pinions of the judges who acted on this occasion, and who had the pportunity of giving these implements a quieter and more rigid trial. premium of £20 was adjudged to Mr. Crosskill of Beverley, for his now almost universally known and approved Machine. The improvements nade in the construction of this crusher have been successfully narrated and commended in previous reports; and testimonials to its useful effect n producing upon soils not cloddy a fine pulverulent surface, as well as its peneficial influence as a roller of young growing wheat, &c. &c., have been o recently collected and laid before the Society, (Journal, vol. iv. page 560) hat it might be deemed unnecessary to add one word more on the The judges, however, have particularly requested the writer to ubmit to the exhibitors the utter inutility of all attempts to compete sucessfully with Mr. Crosskill's implement, unless they can produce a nachine which, like his, can be turned round about, when one of its extremities is fixed, without tearing up the soil and half burying itself in a iole formed whilst turning. It will assuredly be wiser to prove such properties at home than to bring to the Society's meetings, implements ither purporting to be what they are not, or such as have already been clipsed by more excellent inventions. The most complete implement is lot perfect, and there is ever ample room and verge enough for attaining listinction either by the discovery of some better or cheaper principle of onstruction, or by increasing the utility of that which is acknowledged to At the present time Mr. Crosskill's crusher and roller is unuestionably superior to any other brought to the notice of the Society; it cappily combines a sufficiency of weight with bruising action, and simplicity vith durability. The inventor makes them of different lengths, to suit the ircumstances of purchasers, but the farmer will do wisely, when his means ermit, to procure the longest size, as it is the heaviest and most effective."

Extract from the Report of the Royal Shrewsbury Meeting:

"CLOD CRUSHERS.—Mr. Crosskill's well-known Crusher and Roller again roved itself to be superior to all competitors, and received the Society's rize. It was tried against one produced by Mr. Garrett, and another by Ir. Cambridge. The Judges observed, that by reason of every rolling rim eing separate, and all revolving on a round axle, Mr. Crosskill's implement possessed decided advantages over Mr. Garrett's; whilst Mr. Camridge's might be considered as a fair roller, but was not entitled to bear name of a Clod Crusher."

## CROSSKILL'S PATENT ROLLER.

The following are the various uses to which this Implement is applied.

- For Rolling Corn upon Light Lands, as soon as sown, and in the Spring, after frost, it is unequalled. It is found to answer much better than the tedious operation of the Pressers upon Light Soils, where it gives a suitable degree of firmness and tenacity, without leaving a smooth surface.
- For Rolling Corn, &c. the Clod Roller has become invaluable upon Wheats soon as sown;—upon Strong Lands sown late in the year, which are cloddy in the Spring, and is then found equal to once hoeing.
- 3. For Rolling Corn three or four inches out of the ground, upon Land infested with the WIRE-WORM and GRUB, it is found a complete remedy, and has saved many crops from destruction.
- 4 For Rolling Strong Fallow Lands, and Crushing Clods, it is indispensible; it breaks up the hardest Clods, pulverizing them into a fine mould, when in many cases, from the nature of the Land and the dryness of the season, it would have been impossible to prepare the Land without. It has the great advantage of making sure of a sowing season in the driest weather. The Clod Crusher is worked by three horses, and has saved ONE-THIRD the horse power and labour of any other means. By once or twice rolling, it will pulverize the largest Clods, and give a fineness of surface far surpassing what is produced by the Spike Roller, or any other Implement; it is then equal to once harrowing,
- 5. For Rolling Barley, Oats, &c., when the plants are three inches out of ground, before sowing Clover, and other small seeds.
- 6. For Rolling Barley Stubbles, in Autumn, again in Winter, and once or twice in the Spring; when the Clover Plant has a tendency to throw out.
- For Rolling Turnips in the rough leaf, before hoeing; when the plants are attacked by the Wireworm or Grub.
- 8. For Rolling Grass Lands, after compost; and Mossy Lands; a plain Roller is afterwards used; the improvement in the Grass is soon observed.
- 9. For Rolling between the Rows of Potatoes, &c. it is found to do what could not otherwise be equally effected in breaking, pressing, and leaving an uneven or harrowed-like surface upon the Land. It is worked between three or four Rows at once, by taking off the required number of Roller-parts, and placing Iron Bushes in the spaces required, so that the Roller-parts do not injure the plants.

### PRACTICAL OPINIONS ON THE EFFECT OF CROSSKILL'S PATENT CLOD CRUSHER.

THINKING that it might be useful to obtain from those who had used Mr. Crosskill's clod-crusher an account of its action upon their respective farms, I requested him to make the enquiry of them; and the following Tables contain extracts from their answers, classed under five different heads.

PH. PUSEY.

Query 2-Strong Lands.

particularly

clover-seed, strong land.

Query 1.—How far valuable for crushing clods, and for breaking up the strongest fallows in the driest seasons?

Query 1-Crushing Clods.

#### YORKSHII

|  | Query 1 - Ordshing Clods.   | query 2—strong names.  |
|--|---|--|
| H. S. Tномрзом,<br>Kirby Hall.   | For breaking clods after turnips, eaten on<br>the land late in the spring, and on land in<br>course of preparation for fallow crop, it is<br>very useful, in at once reducing clods, so<br>hard that the harrows made little impression<br>on them. I consider your patent clod crusher<br>an exceedingly valuable implement. |  |
| T. ALMACK,<br>Bp. Burton, by Beverley.                                 | Invaluable.   |  |
| THOMAS JACKSON.<br>Routh, Beverley.                                    | A most valuable implement. After breaking up my tenacious turnip land, I have had considerably finer and better crops than before.  | Very satisfactory.   |
| Thomas Dowarsby.<br>Holmpton, Holderness.                              | I could not work my strong land to get it into a good state without your clod-crusher.  |  |
| T. WHEATLEY,<br>Neswick, Driffield.                                    | In the preparation of strong land, when particularly hard, your clod-crusher has completely pulverized it, when uses of all other implements have been vain.  | It is never used to more advan-<br>tage than upon wheat, rolled in<br>the spring: only let it be dry<br>enough for its use.  |
| Rt. Hon, A. Duncombe,<br>Kilnwick Percy, by<br>Pocklington.            | Upon some of my land, in a rough and bad state, we could not do without your crusher.   |  |
| R. DENNISON,<br>Kilnwick Percy, by<br>Pocklington.                     | Nothing can excel it. I have two of your patent clod-crushers in constant use.  | Very good.   |
| H. P. CHOLMELEY,<br>Brandsby, by York.                                 | A most valuable implement for breaking<br>up my fallow-land, we could get no turnips<br>without the use of it.  | It reduces all the large clods, and brings the land into a very good state.  |
| Rev. S. CRYKE,<br>Wiggenton Rectory,<br>York.                          | I consider it of the greatest utility.  | I have always rolled new-sown<br>whenever the weather will al-<br>vantage upon both soils.   |
| W. C. HARLAND,<br>(Agent Mr. FERNIE),<br>Sutton Hall, by York.         | A most useful implement; by far the best for this purpose, I have ever tried.   | I consider it valuable for<br>rolling land as soon as sown;<br>provided it is dry.   |
| Sir S. CROMPTON, Bart.,<br>(Agent, Mr. FAINT),<br>Wood-End, by Thirsk. | It effectually breaks down large clods, and<br>enables me to obtain turnips on land on<br>which, without it, there would be no chance<br>of growing them.   | It answers well for rolling wheat after seeds; and also for rolling rough land before sowing barley, &c.   |
| John Hutton,<br>Sowber Hill, by North<br>Allerton.                     | I find it most valuable for preparing strong<br>land for turnips; and have no doubt I shall<br>be able to do entirely without summer fallow<br>on my strong land.   | I like it much for winter-sown wheat, rolling it in the spring; it makes an excellent seam for the search of the s |

on my strong lands.

Query 2.-How far valuable, upon strong lands, for rolling corn as soon as sown, and lands sown late in the year, which are cloddy in the spring?

Query 3.—How far valuable, upon light lands, for rolling corn as soon as sown, and in the spring, after frost?

Query 4.—How far valuable in stopping the ravages of the wire-worm and grub?

Query 5 .- How far valuable upon grass-lands, upon mossy-lands, and worm in meadow-lands?

#### EPORTA. Query 4-Wireworm and Grub. Query 5-Grass Lands, &c. Query 3-Light Lands. Of great value in giving firmness to light land immediately after some of T solving, both for wheat and spring crops, as it gives a peculiar solving to the soil, which enables it to retain moisture at the same time that it leaves the surface rough, and therefore not liable to scarp. It has been one of the principal means whereby I have been enabled to grow very heavy wheat-crops upon land which was considered not very good wheat-land. J. BROWN Of great utility in both cases. On one part of my farm, which is of a light, peaty nature, it is far su-perior to the presser in preventing Most valuable in stopping the ravages of the slug or grub, on my strong land, by rolling the seed immediately after plough-ing in the autumn. Pev. T. Caron, Skeibrooke Fark, by the wheat-plant from rooting up by frost in the winter. 8. Taykon, Gooldoorpe, by Tielchill It cannot be beat; only min-The oftener rolled the better, on valuable when the land is dry light land, more particularly wheat easons I could not plant my potat turnips without its application. and oats. A great preventive when corn More valuable even in this than is coming up still the real it it any other use. if to yantaranon heavy crop of turnips on strong and, which was eaten off by s I have found it valuable for rolling oats: it does not injure the plants at the wet weather, it was ploughed r. The soil tore up in cakes all, only works strong the .lla Thave frequently, with much corn, with a view to compression, low; and believe it of material adadvantage, passed the roller over dto a proper tilth, to sow barley, grass-lands, upon which comlod crusher. Its cost of 20 guin bushels to the acrepost has been spread, with a view to pulverize lumps before bushand antly repaid by the grop. harrowing. it Grange, by More beneficial upon light lands than upon strong, in consolidating the soil about the plants. re fried your patent clod-crush It answers well for both these pur-

It is very useful in grass-lands in effectually breaking the lumps of lime and earth; and by run-ing a bush after, makes it quite

ufly answers my expectation.

yent informs me that he has found it eaful in the preparation of land for turnips: without it, indeed, it would

en very difficult to obtain a sufficient-surface for the reception of the seed, the principal tenants also used it,

|   | Query 1—Crushing Clods.   | Oner 1 See 1  |
|---|---|---|
| W. Rosyos,<br>Newby Wisk, North<br>Alerton.             | Meetminship Promise   | •   |
| Jour Forter.<br>Newton, Bolaic.                         | It is invaluable for priveriting the clods,<br>letting out the seeds and weeds, when no<br>other maker could be able to perform it in a<br>dry season.  | It is invaluable for consol-<br>dating the land as soon as sow<br>leaving an uneven surface, as i<br>harrowed; and in spring it fa-<br>tens the root to the soil.   |
| H. Nichols: v.<br>Rand Grange, Esdale.                  | A most excellent implement. I never stw<br>anything to equal its effects.   |   |
| R. Briggs.<br>Ripley, Ripon.                            | I cannot make use of terms too highly landatory of its value and use under this head.   | Very useful in rolling when<br>in spring, and more particularly<br>after clover-seed is sown.   |
| J. WHITAKER,<br>Buriey, Otley, Leeds.                   | Of the greatest benefit when the land is dry.   |   |
| H. Smrrn,<br>Drax Abbey, Selby.                         | The most valuable implement I have seen for strong land.  | It is very useful in spring and when the turnip-land is hard.   |
| J. Brown,<br>Wrangiowsk. by Ponte-<br>fract.            | The best implement I have seen.   | Very valuable.  |
| C. CHARNOCK,<br>Ferry Bridge, by Hud-<br>dersfield.     | Exceedingly useful: in fact, I have often said it has enabled me to set the seasons at defiance.  | I have found it extremely useful on wheat, as soon as sown in the autumn, and again in the spring.  |
| Rev. T. CATOR,<br>Skelbrooke Park, by<br>Doncaster.     | For limestone and stiffsoil, one of the most medui implements in husbandry.   |   |
| R. TAYLOR,<br>Goolthorpe, by Tiekhill.                  | The best I have ever seen.  | It cannot be beat; only mind the land is dry.   |
| E. Thompson,<br>Armin, by Howden.                       | Very valuable when the land is dry. In some seasons I could not plant my potatoes, or sow turnips without its application.  |   |
| J. MECKLETHWAITE,<br>Ardsley House, by<br>Burnsley.     | A most valuable implement. It also possesses one great advantage, in not cutting or breaking the twitch.  |   |
| JOHN DRABWELL,<br>Thurcroft Hall, by<br>Rotherham.      | I purchased my clod-crusher of you in the spring of 1842, and have made several operations with if, the results of which I have nowmuch pleasure in communicating to you. After a heavy crop of turnips on strong limestone land, which was eaten off by sheep during the wet weather, it was ploughed up for barley. The soil tore up in cakes and clods as hard as bricks. I know no implement which would have enabled me to reduce this land to a proper tilth, to sow barley, but your clod crusher. Its cost of 20 guineas was abundantly repaid by the crop. | I have used your patent clod-<br>crusher, for wheat, upon land<br>consisting of limestone, grit-<br>stone, and strong land, sown<br>partly in autumn and partly in<br>the spring. I have in each in-<br>stance left a portion unrolled;<br>and those parts show the evil<br>arising from the grub, wireworm<br>and blight, in different situa-<br>tions, to the amount of 6 to 18<br>bushels to the acre. |
| T. C. Johnson,<br>Chevit Grange, by<br>Wakefield,       | I am perfectly satisfied that it is a good implement, and has been of great benefit in breaking up my hard turnip-land.   |   |
| ight Hon. Lord HAWKE,<br>Womersley Park,<br>Pontefract. | I have tried your patent clod-crushing<br>roller, which I purchased of you last spring,<br>and it fully answers my expectation.   |   |
| •   | My agent informs me that he has found it most useful in the preparation of land for sowing turnips: without it, indeed, it would have been very difficult to obtain a sufficiently fine surface for the reception of the seed. One of the principal tenants also used it, with great success, for the same purpose.   |   |

#### ORTS - Continued.

| Query 3-Light Lands.   | Query 4-Wireworm and Grub.   | Query 5-Grass Lands, &c.   |
|--|--|--|
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
| It makes the land more firm than   | It is invaluable for giving that<br>solid texture, forcing the vermin                          |  |
| e presser; and in the spring, after ost, the land is not liable to scarp,  | down from the roots of the   |  |
| after the common roller.   | plants, which the common roll-   | A  |
|  | er is not able to perform.   |  |
| Most excellent.  | 1  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  | •  |
|  | 1 ,  |  |
|  | \ <u></u>  |  |
|  | Very advantageous in stopping<br>the ravages of the wireworm<br>upon strong land after clover- | •  |
|  | upon strong land after clover-   |  |
|  | stubble.   |  |
| Of essential benefit.  | I think its greatest utility is in<br>stopping the ravages of the wire-                        |  |
| ·  | worm.  |  |
| Answered in Query 2.   | Very useful. I have this season  |  |
| tinsweieu in query p.  | a particular example of its use.   |  |
| •  | 1  |  |
| 06   |  |  |
| Of great use upon light soils, after<br>wheat is sown. In some seasons I   |  |  |
| night lose half a crop without it.   |  |  |
|  |  |  |
|  |  |  |
| I have used the clod-crusher in the  |  |  |
| pring, upon wheat sown on light oils, with great benefit.  | 1  |  |
| · · · · · · · · · · · · · · · · · · ·  | ·  |  |
| 10 CT  |  |  |
|  |  |  |
| I may here say that my neighbour   |  | I have used the roller after<br>draining grass-land, preparatory   |
| Ir. Hall, of Riveton Park, broke up  |  | to applying bone dust, and again   |
| ome grass land this spring, and owed bats, using the clod-crusher.   |  | after having sown the dust; and found from the parts omitted that  |
| did likewise, but did not use the  | 1.   | the application has been allended  |
| lod crusher. Mr. Hall is reaping<br>to 4 quarters per acre more than<br>ne, and I have no doubt that your<br>atent clod-crusher has made all the   | 1  | with the greatest advantage.   |
| atent clod-crusher has made all the  |  | ••   |
| lifference.  |  |  |
|  | 1  | Company of the Compan |
|  |  |  |
| 7  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
| The state of the s |  | Will the   |
| Market State of the State of th |  | or staying t   |
| · · · · · ·  | 1  |  |
|  |  | V.   |
|  | 1  |  |
|  | 1  | •  |

Query 5-Grass Lands, &c. Query 1-Crushing Clods, 7000 Query 2-Strong Lands. I think it most invaluable. Excellent for this purpose. J. BEAUMONT, Brantingham. A most excellent implement for breaking up Sometimes most excellent. particular:-A neighbour of min WILLIAM STICKNEY, clods upon our strong land fallow, and thereby liberating the seeds of weeds, which then come in contact with finer and moister mould, Ridgmount, Holderness, 8th mo., 2, 1843. very dry and cloddy, The har covering the seed, but were born only rolled from one place to on the surface. Both my neigh little prospect of a crop. I len rolled it. The points of the rolle by which means they vegetate, and after-operations destroy them. Also, it frequently happens that a considerable quantity of the roots of couch grass are enveloped in the large seed in contract with the little soil from the crushed clods co clods, which our harrows and the common roller will not break; the clod-crusher will scratch them out, and expose them to the sun tated, and produced a good crop and atmosphere, by which means they wither and die. LINCOLNSH It is particularly valuable for I have seen no implement equal to your C. COATES, Beelsby, by Grimsby. strong turnip land, when late clod-crusher for this purpose. eaten off in the season for barley. Very useful. I would not part with it for It answers uncommonly well R. RENNARD, Beelsby, by Grimsby. three times its value. for this purpose. I have, from long experience, found it to be Upon wold and light lands I FRANCIS ILES, a most valuable implement: and I think no consider it very valuable for roll-Barnoldby-le-beck, farmer's establishment is complete without by Grimsby. ing wheat as soon as sown, when the season will admit, as by its peculiar action on the land it it. I have in several instances broken up exceedingly strong fallows on my farm at Barnoldby, which is a clay soil; and have also been enabled to sow barley in the spring, gives a firmness to the plant which prevents its being worked with good effect, when otherwise I should have found it impossible to do so. I have out by the winter frosts. I have also used it the last two seasons upon my barley in the spring after the plant was up, and well grown, and where the clods were also this season been enabled, by the aid of your crusher, to break up and work 50 acres of strong wold land, on my farm at Wold Newton, for turnips, with the best effect—the rough and sharp, immediately plants growing and looking remarkably well before sowing the small seeds, the result of which has been most satisfactory. The seeds have taken better than I ever had thereon. Of the general utility of your clod-crusher, I can speak most positively; and I feel fully assured that no one, after giving it a fair trial, will ever regret having made the purchase. them before in the same fields; and so far from the blade of the barley being injured, which I had feared, I had full proof that the crop was benefited, which I can only account for by the peculiar action of the crusher giving firm-ness to the plant, and retaining the moisture without leaving the I have used the roller after draining grass-land preparatory to apply ing bone dust, and again after having sown the dust; and land in a sad or heavy state. THOMAS KIRBY, Very valuable for crushing clods, and breaking up the strongest fallows in the In my opinion it is an implement that no farmer should dispense with, being wanted, as the seasons vary, both upon light and strong soils. driest seasons. Caistor. It may be used at any time I have used your clod-crusher, and found it WALKER DAVY, a most valuable implement. It will reduce my clods to powder, and break up the strongest fallows in the driest seasons. after sowing, with the greatest Thorsway Grange, by Market Rasen. safety and much advantage: and upon lands sown late, which are cloddy in the spring, it has a better effect than any other implement I have ever seen. The land requires to be dry, when its use at all times is of great benefit. In my opinion it is the best implement ever come Your clod-crusher has been of great service to me this season. I consider it a first rate WILLIAM WITLAM, Louth. implement. It reduces the land to a fine mould, and leaves it much opener than a

I have found it essentially useful, and a

great saving in labour, in producing a fine

stone roller.

mould.

C. C. ROBSON,

Cadesby Hall, near Louth.

out for all sorts of soil.

#### Crosskill's Patent Clod-Crusher.

#### PORTS L'Continued.

| Query 3-Light Lands.  | Query 4-Wireworm and Grub.   | Query  | 5-Grass Lands, &c.                               |
|---|--|--|--|
| One of the best purposes it can possibly be used for.   | ces the rough hallows on very stron<br>set effectually. I could not gro-<br>nes as a preparation for wheat orga-   | linids m   | color flamiliar                                  |
| mention one circumstance in had sown a large field with oats, rows had but little effect in   | stuchles in order in dry seasons   | my bend<br>Justin  |  |
| up by the clods, which were unother, the land being very dry bour and I thought there was nim my clod crusher, and he pressed a large portion of the noisture left in the land. The rered the seed, and it soon vegenuch beyond our expectation.  |  |  | Cleare Herrox,<br>Cate Burlow,<br>by Gaushorom   |
| Louisdiding it bear exed I  | con and I terminated to the second   | -  | NIVIE ()   |
| effect upon corn land in the spring.  |  | ्रामण्ड  | "Street Supplied                                 |
| The reason provides and the control of the control | the most satuable implement I have for this purpose, score on a constant of the constant of th | M Neph Jorg  | Varke,   |
| In both cases I think it exceedingly  | Had no experience  | H I have   | id no experience                                 |
| seful. In the last spring I had a<br>siece of wheat upon rather light,<br>hin, soiled chalk land, which was<br>serceptibly losing plant every day<br>rom the effects of the winter's frosts,<br>as soon as the weather permitted,   | ler ved spraireqxe on baH. Indeed not have get my fallows in order your glod crusher. On my strong we it less very much forwarded my my it less very much forwarded my my strong was the control of the sand of th | should a sittle a sit | ectwell by Line in                               |
| which was in the last week in March, had it rolled with your crusher, fier which it began regularly to imrove, and now is looking very well. The large iron roller would in such in instance as this do no good whatever, but rather harm, as by merely oning over the surface it pulyrizes.  | ies the eledernsherindispensible<br>envalues associated have been<br>der for turnips withent it, or me<br>as either, to whem light it, and<br>have one before another season   | This vent  | ti, ernegres-as,<br>tuluisthicipe,<br>by biacone |
| ne light top soil, without giving the ecessary adhesiveness to the plant: and should dry windy weather ensue,   | st iseful of altagricultural inco-<br>tion the land is rough and onlook  | The mix<br>condition   | e partie suga<br>swelfingthoope<br>by Lincoln    |
| ondition than before, whereas the stion of your clod crusher is similar that of treading with sheep, going own to the root of the plant, and aving it firm and secure.  | leryon implement extechingly be<br>rithis purpose. I broke up a piece<br>and full of ant hells; a very rough<br>ter bloughing up the fullywe aced a<br>barrow, and when dry employed   | of crass life to the field of the field to t | J. R. Stanger.<br>Verilitärling, by<br>Lingdon   |
| of soliding and racte firmly some   | erusher over the ground twice, The<br>sufficiently polycrized to grow a<br>p of turnips without any furth-   | land was   |  |
| I have found great benefit from<br>sing it also upon light lands soon as<br>wn, and in the spring after frost.  | Invaluable.  | ploughin   | M Contract<br>the petity threete                 |
| When the weather will per-  | had two of your clost crushers in ex-  | aved I   | Chaspins,  |
| I consider it infinitely preferable to<br>ay roller, as it leaves the land<br>ithout a smooth surface.  | Upon a comparison of the state of my farm before the use of the patent clod crusher, and subsequently, I am bound to state that the wireworm and grub have been much less prevalent.   | for this y<br>loss with<br>lorse lai   | Minishes V                                       |
| Of great advantage.   | Many crops are saved from the wireworm by this implement, and to be a sounce of total sounce of  | Quites<br>mense<br>down.   | atisfactory. It does in<br>execution in breakin  |
| •   | It produces a fine turnip mould which retains moisture and induces a quick and regular growth of the plant and prevents the ravages of the fly.  | renacious<br>tenacious   | W. B. Wisnatt.<br>Hareby.<br>ny Holingbroke.     |

| 7 0-Grass Lands, &c.   | Query 1—Crushing Clods. (1994)   | Query 2-Strong Lands.  |
|--|--|--|
|  | Itreduces the rough fallows on very strong lands most effectually. I could not grow  | I find it often very usefu<br>getting in my spring corn, w<br>the ground is dry and rough,<br>short I consider it a great b<br>indeed to the strong land far   |
| WILLIAM HUTTON,<br>Gate Burton,<br>by Gainsborough.                    |  | the clots, which were contact the leading were dry and I thought there was not contact, and he can be come the contact the con |
| C. BAYLES, Riseholm Grange, by Lincoln.                                | Superior to any other implement I have ever seen.  | I have used it with the be effect upon corn land in the spring.  |
| E. CLARKE,<br>Canwick, by Lincoln.                                     | By far the most valuable implement I have yet seen for this purpose.   |  |
| S. Hodgkinson,<br>Greetwell, by Lincoln.                               | I have derived great benefit from it. Indeed I should not have got my fallows in order without your clod crusher. On my strong clay fallows it has very much forwarded my work.  | I roll all my wheat win<br>after the frosts, and soon se<br>great change.  |
| J. G. STEPHENSON,<br>Skellingthorpe,<br>by Lincoln.                    | I consider the clod crusher indispensible. This year my fallows never could have been got in order for turnips without it, or my neighbour's either, to whom I lent it, and who will have one before another season.   | My wheat has generally root in the winter and spil Last year I rolled it as swi drilled, and also early it spring, and never had its government.   |
| FREDERICK SHAW,<br>Skellingthorpe,<br>by Lincoln.                      | The most useful of all agricultural implements, when the land is rough and out of condition.   | ne reness to and and the line a |
| J. B. SLATER,<br>North Carlton, by<br>Lincoln.                         | I consider your implement exceedingly beneficial for this purpose. I broke up a piece of grass land full of ant hills; a very rough field. After ploughing up the hills we used a heavy ox harrow, and when dry employed your clod crusher over the ground twice. The land was sufficiently pulverized to grow a good crop of turnips without any further ploughing. | notice, who are not continued with sheep, which are not continued to the plant.  |
| R. COLLETT,  | Invaluable.  | n nonabr Very useful.  |
| Swinthorpe, by Lincoln  R. S. Graburn, Branswell Cottage, by Sleaford. | I have had two of your clod crushers in extensive use, and find it admirably calculater for this purpose. I should feel greatly at loss without its aid: also a great saving o horse labour is effected upon strong soils.   | after sowing the wheat, il   |
| H. HANDLEY,<br>Culverthorpe Hall, by<br>Grantham.                      | I have used your clod crusher upon m<br>strong clay farm, and found it very effective<br>in preparing fallows especially on tare groun<br>ploughed in summer after the removal of the  | d<br>e   |
| W. B. WINGATE,<br>Hareby,<br>by Bolingbroke.                           | Your clod crusher is a most useful an valuable implement, and an article no or should be without, occupying strong artenacious soils.  | d<br>de<br>d   |

#### PORTS-Continued.

| De Query 3-Light Lands.  | Query 4-Wireworm and Grub.  | 50   | Query 5—Grass Lands.   |
|--|---|--|--|
| Of great advantage for this purpose.   |   | 107  | COSMACI THRIBINI   |
| utheren mould could not be raised L<br>ally, the crop of turning would hav<br>the clod-crusher. I have also used it<br>and can with pleasure hear testimon   | A family sufficiently assumed that the stands   | day of the                                     | Fig.17 of Aldress  |
| I borrowed one of your clod-<br>rushers of my neighbour, the Reu,<br>P. Peel, of Willingham, to roll my<br>new-sown wheat with, on my light<br>foil, and am so far satisfied with the<br>ppearance of the wheat now that I<br>lesire you to send me one by the<br>light Sentember.   | uny two strongofirms thavel us<br>give constneed of their superiority<br>of two strong clays. Their cluders<br>filling when no common rother to<br>not suckentic facilities a common<br>before state for the next plongling   | on it  | d NA HARLANA, SANGER AND   |
| ner invaluable.  | d. essence will do more execution or crossing stations a basis muscle in the control of the cont    | 1 100  | Months Maccob  |
| For these purposes it is infinitely, uperior to the common land roller. to makes our land more solld, and at the same time prevents the dry March vinds from blowing the corn bare.  | Here again I prefer it, for the same reasons as in the answers to the preceding questions.  | or m   | v ed a illott<br>d ha min  |
| I have derived most benefit from it<br>p land ravaged with the wireworm,<br>ould save the wheat; but very s<br>egan to fasten at the root, and gather<br>have rolled the same description of<br>there the wireworm had begun, and  | in rolling some light fresh taken-<br>The first year I thought nothing<br>oon after using your crusher it<br>I reaped a very abundant crop,<br>land twice over with it this year.   | til 1<br>la out<br>ko op<br>kolmel<br>pland    | of II II day   |
| I have always rolled my light lands ith it in the spring, and believe it qually valuable upon light land times as upon strong. Wherever theat is grown, and wherever turps are intended to be grown, it is great benefit.  | I consider it very useful for<br>this purpose, if used early enough.<br>My wheat appears to have im-<br>proved after using the clod-<br>crusher.  | ny E.<br>  (n. s)<br>  (n. s)                  | Reviews 15<br>Bintle + V - c e<br>bee V  |
| then y gallettel least to food<br>blene of Arow of it to begin<br>of the reary food had been<br>available of the floor food food   | Especially useful for all lands subject to the wireworm and grub.   | idT<br>jour<br>www.                            | tquation form:<br>binit ton twice<br>binetin   |
| Upon our heath and clift lands<br>ter ploughing, and previous to drill-<br>in the autumn, and again in the<br>oring, it is attended with avery bene-<br>cial effect, it gives a greater degree<br>solidity, and more firmly secures<br>e root.   | I find it, for stopping the ravages of the wireworm and grub, a very useful and effectual implement.  |  | With Eld St. United St |
| 161  | on distribution and it was 1 that 20  | npeani<br>Peani                                | (wins)   |
| ne Last year wasthe first time   | rishing a steam of them as up fallo   | Porc   | I. H. SEPPWOREN  |
| In both cases I have used the im-<br>lement extensively, with consider-<br>ble advantage. I have derived great<br>vantage from consolidating the soil<br>ter it has been lightened by the<br>tion of the frost.  | P.S. In justice to yourself as the inventor, I am enabled to state that at no meeting of the Royal Agricultural Society has there been exhibited any essential improvement upon your original invention.  | d busi<br>d busi<br>blos o<br>questi<br>lastos | Northenby, Ly<br>Muther lossen.  |
| pultralled at the code ores.  was decidadly the beet code and the code | est sejment to a consist of town black to<br>the consistency of the consi | Masn<br>Masn                                   | the discount of the same   |
| ence was lace not conflict to had I described to pears to being wretten both a straw where the was rolled with the clod-cruster.   | The state of the s    | 1111   | of any desired and a second  |

|   |   | LINCOLNSHI   |
|---|---|--|
| A 40 1 24   | Query 1—Crushing Clods.   | Query 2—Strong Lands.  |
| ROBERT DAWSON,<br>Strubby, by Alford.                     | Your elod-crusher has been of great adv<br>when the land had become cloddy and suffic<br>cover the seed. In one instance, especially<br>almost entirely failed, if I had not used the<br>with good effect after the corn was sown; and<br>to the excellency of "Crosskill's clod crusher  | then t mould could not be raised to,<br>the crop of turnips would have<br>clod-crusher. I have also used it<br>I can with pleasure bear testimony  |
| C. G. Holland,<br>Carrington House,<br>by Boston.         | Upon my two strong farms I have used t<br>thoroughly convinced of their superiority ov-<br>invented for strong clays. Your clod-crushe<br>pared fallows when no common roller woul-<br>does not sodden the land like a common ro-<br>much better state for the next ploughing.  | er every other implement as yet<br>raiter passing twice over has pre-<br>d have made any impression. It  |
| John Mossor,<br>Moulton Marsh,<br>by Spalding.            | The clod-crusher will do more execution in going overrough dry fallows than any other implement I have ever seen work; it will have the desired effect when all others fail. I was previous to becoming a purchaser; I no soon more execution once over than my heavy iron in fact I could not get the land fit to receive:   | invaluable.  s allowed to try your clod-crusher er got to work it than I found it did roll would have done in ten times.   |
| The Hon, and Rev. W. PEGUS, Uffington House, by Stamford, | For the purposes 1, 2, 3, and 4, I have used<br>and after three years' experience I can with<br>poses, it is the very best and most economical<br>upon his farm. Several of my neighbours ar  | confidence say, for all these pur-<br>implement that a farmer can have   |
| G. H. BETTS,<br>Keiton, by Stamford.                      | I had a convincing proof of the utility of<br>the clod-crusher upon my strong land this<br>spring. I decidedly could not have sown my<br>barley without the use of it. I assure you I<br>should be very sorry to be without it.   | It breaks the crust on the top<br>and makes solid the earth at the<br>root: while it leaves the top sur-<br>face in a nice state for the plant<br>to tiller in; while the common<br>roller merely breaks the top sur-<br>face, and if wind succeeds, does<br>injury rather than otherwise, by<br>blowing it away.  |
| STAFFORD O'BRIEN,<br>Blatherwicke Park,<br>by Wansford,   | A most valuable implement; I have chiefly used it forcrushing clods: it does its work far better than any implement I ever used or saw. I could not manage my farm without it.  | It answers well to roll comjust sown.  |
| CHARLES TONGE,<br>Branston, near<br>Lincoln.              | The best possible implement for the purpose; and the only one I have found to answer the purpose.   | Very good for rolling wheat as<br>enough for it to work. I consider<br>one that every farmer would like<br>may get well paid for his inven-  |
| WILLIAM Dods,<br>Gosberton,<br>near Boston.               | I have had your clod-crusher so short a tim<br>testimony of its actual experience, not having<br>far as I have used it I consider it a most value<br>to recommend it to my neighbours.  | used it at seed time; certainly as   |
| H. Watson,<br>Walkeringham, near<br>Gainsborough.         | I have had so little time to use the clod-<br>crusher, that my experience, I think, will<br>avail you but little. I have found it most<br>invaluable for crushing clods.  |  |
| J. H. SKEPWORTH,<br>Normanby, by<br>Market Rasen,         | For crushing clods and breaking up fallows in a dryseason, I consider it the most effective implement ever invented; in fact, a piece of land belonging to my neighbour Mr. E. Young, could never have been got ready for sowing turnips this year, if it had not been for your valuable, implement; it was baked so hard and dry, that a heavy iron roller had no effect upon it; he passed the clod-crusher over it once, and most effectually pulverized it for drilling, and a very fine crop of turnips is the result. | Last year was the first time of my using your clod crusher on wheat directly after sowing, I used it on a 30 acre field, part of which I left undone, putposely, about 5 acres, which I had rolled with a common roller, and harrowed afterwards with a pair of light harrows. From the first appearance of the wheat, the part rolled with the clod-crusher was decidedly the best (and many people who rode past the field remarked it, and inquired of me the reason) up to the time of going into car, when the difference was then not so good to see, but I fancy since cut there appears to be a greater bulk of straw where it was rolled with the clod-crusher. |

#### PORTS-Continued.

| Query 3-Light Lands.  |   | Query 4-Wireworm and Grub.   | Query 5—Grass Lands, &c.                                       |   |
|---|---|--|--|---|
| strong land, he ought porto be will a<br>possible to get strong land property<br>to a tile season ever so are the class   |   | maider the election of a extremel arxive control of anxions of the election of | 1 100 1<br>10 10 0<br>10 10 0<br>10 10 0<br>11 10 0<br>11 10 0 | Truxexe Dravis, O'conflictor Market Bases   |
| NOTTINGHAMSII   |   | I crushed a field of oats (sow<br>where the slug and wireworm<br>I may confidently say I am ind<br>fine a crop as can possibly be.<br>preparing seed-lands, fresh broke  | were m<br>ebted t<br>It is a                                   | aking great ravages, and<br>to your implement for as<br>n excellent implement in  |
|   |   | - Indiana  |  | The Duke of PourtAs n.  |
|   | -sq<br>isos<br>gni                              | By pressing and working the land down solid, it gives it a chance to strike afresh, like a plantfresh set, and thus recovers tiself, muo and house to arreno last and the set of the last was rever because of the solid set.  | ns l<br>letter<br>kertev                                       | n elbeck Abbey,<br>Worksop,<br>J. D. Ct. trr.<br>Bruby Moon<br>East Redford   |
|   | +143  | have foundly answer upon strong<br>better than any other implement.  | lows   | Nir. John Noton. Railiff to R. Arkwitcht, T., of Sutton Hall, Per yell.   |
| Phave used it for rolling who,<br>in the spring, and found it as-<br>swer very well. Leonsider it<br>very useful implement.   |   | ve fried thacled crusher upon air for instance, I held wishlest for instance, I held wishlest firely were eaten of when it was a per cyhed up, and baked very fry i need for contrasher, I should not heaven with barley.  | clay s   | S. S. Saloser,<br>Kinesey, by Tuxk r i.   |
| It is very valuable for automa-<br>sown wheat in the spring, even<br>onstrong land. I volled output<br>at a field with your clod-crus by<br>and left purt unrolled. The<br>periority of the part volled over<br>very evident.   | one<br>one<br>one<br>our<br>our<br>ble          | cloth coacher is a very valuable for unreporting fallow had in dry sees a case the size of the cloth to such is that the first shower of rah marks in to mould; when, without y in large it would have been impossible in the first star of coacher in the such case of the such is the large is the such in the such is the large in the such is the such in the such is the such in the such is the such in the  | ment il redi<br>partic<br>then                                 | J. E. Drasse 77.P.,<br>Ossington, by (2xlord)   |
| soon as sown, if your land is it the best implement of the kind, a to possess, and trust that the invention.  | dry   | It arrests the progress of the<br>wireworm very much, if taken in<br>good time; and I have known it<br>of particular benefit.  | Summs  | Jensinski<br>Ley Endis Rooms  |
| reserence to egrowth of clove and gress seeds sown therowir   |   |  |  |   |
| A very excellent implements for rolling wheats in the spring of the very expectally melon as less and seeds, which lie rath liefs, and seeds, which lie rath plant, if not pressed down after plant, if not pressed down after  | en<br>Jun<br>Jun<br>do                          | Thave found it very beneficial in regard to the grub.  | tand:<br>sufficie  | 1 W. News. 14. Itahlem on Trent. Newsth.  |
| I had another field of 27 acres (to joining the one before-mention which was sown with wheat; I it ended to treat it in the same man as soon as sown, but in consequent of the weather being wet, it was it possible to use either the common or the clod-crusher. I was therefolding to let it take its chan | ed) in- ner nce m- oll ore                      | e had little oreasion to use it for t  | zad I<br>eograpq   | Ropent Faugess,<br>Reckingbane,<br>Newark   |
| although it is more subject to the known it. The field of wheat wa had destroyed it for acres togethe being a crop, although it looked p worm had begun its ravages; it time half the field would have be combled to we the alcd grades.  | wire<br>s on<br>er, al<br>retty<br>was<br>en de | worm than any field I have on my is clover-ley; it was a very bad crop I over the field, in patches. I had y well during the winter; in the spr more preceptible every day that I I restroyed; however the weather for sed it first across the lands, and aftiges, and there was no appearance od bulk of straw, whatever the yie the first year. In my humble opin without one, either on light land o  | very ba<br>very ba<br>ing it v<br>ooked a<br>tunatel           | er; in fact, the wireworm ad faith of the wheat ever vas very evident the wire- tit; and I think in a short y became dry, and I was |

#### LANGOLNEH

|   |   | I should the least the same of   |
|---|---|--|
| ory 3-tirase Lands see.   |   | Query 2-Strong Lands.  |
| THOMAS DIXON, Osgodby, by Market Rasen.                                 | I consider the clod-crush-r extremely us mer is anxious to obtain a turnip crop on strout one; as, in some seasons, it is impossivorked or fine enough for turnip-seed; and terusher, by passing two or three times over say, to powder. I left my farm at Riby las of the farming business. At my sale last Majos, of its cost, after I had used it four or estimation it was held in. | ble to get strong land properly<br>be the season ever so dry, the clod   |
| r excellent raplement is a<br>wheel, wheel,                             | from rep as can possibly be. It is a proposite seed-banks, hash broken up f   | NOTTINGHAMSH   |
| The Duke of Portland,<br>Welbeck Abbey,<br>Worksop,                     | Perfect.  and anish to the property and property it, allow new home.  | 100  |
| J. D. CLARK,<br>Barnby Moor,<br>East Redford.                           | I am happy to say I have one of your patent clod-crushers, and have found it the most valuable implement I ever saw in breaking up the clods on strong clay lands.  | 12-14-14   |
| Mr. John Noton, Bailiff to R, Arkwright, Esq., of Sutton Hall, Derbysh. | We have found it answer upon strong fallows better than any other implement.  | : : : : : : : : : : : : : : : : : : :  |
| S. S. Short,<br>Kingsey, by Tuxford.                                    | I have tried the clod crusher upon strong clay soil. For instance, I had a field of turnips which were eaten off when it was wet; it was ploughed up, and baked very dry; had it not been foryour crusher, I should not have got it sown with barley.   | I have used it for rolling wheat<br>in the spring, and found it an-<br>swer very well. I consider it a<br>very useful implement.   |
| J. E. Denison, M.P.,<br>Ossington, by Tuxford.                          | Your clod crusher is a very valuable implement in preparing fallow land in dry seasons. It reduces the size of the clods to such proportions that the first shower of rain makes them fall into mould; when, without your clod-crusher, it would have been impossible to get the land fit for any sort of spring or summer cultivation, and advantage.                                  | It is very valuable for autumnsown wheat in the spring, even on strong land. I rolled one part of a field with your clod-crusher, and left part unrolled. The superiority of the part rolled was very evident.   |
| John Parkinson,<br>Ley Fields, Newark.                                  | It is superior to any other implement I have tried for crushing clods on strong lauds.  | It is of very great use in pre-<br>paring the land before and after<br>sowing corn, and especially with<br>reference to the growth of cloves<br>and grass seeds sown therewith   |
| J. W. NEWSTEAD,<br>Dunham on Trent,<br>Newark.                          | I have found it of great benefit in breaking up my land for spring corn and for turnipland. I should not have got my strong land sufficiently fine for barley this spring without it: I really do not know what I should do without it.   | A very excellent implement for rolling wheats in the spring of the year, especially on clover leys and seeds, which lie rathe hollow, and very frequently losplant, if not pressed down after frost.   |
| Robert Faulkes,<br>Beckingham,<br>Newark.                               | I have had little occasion to use it for this purpose.  | effect upon land sown with whe after turnips in the spring; it is now my invariable practice.  |
| has consosince I have   | and the carry field I have on my farm, an   | not a proper some at a recommendation of the sound of the |
| SAMPEL ABBOTT, Lowdham, near Nottingham.                                | I cannot speak more highly of your clod-<br>crusher than it deserves. It is the most<br>powerful and efficient pulverizer of land that<br>I ever met with.  | radeare bule att are or bold   |
| W. W. Moody,<br>South Leverton,<br>near Retford.                        | I have only had your crusher this season, and find it the best implement ever introduced in our part of the country for these purposes.   |  |

| Query 3—Light Lands.   |  | Query 5—Grass Lands, &c.   |  |  |
|--|--|--|--|--|
|  | Query 4 Wireworm and Grub  | Query  | J-Grass Lands, &c.   |  |
| Good for rolling corn in the spring upon lands sown late it. the year.   | Migat valuable.  |  | Unflield Hall, Derby.  |  |
| On strong land sown with<br>wheat in the sutumn, and on<br>clover-ley before sowing, I have<br>used the clod-erusher with very<br>creat advantage, also after one  | had long say orience with your pa-<br>ersystee, and have now in darced the<br>add to accept a good hamp culture<br>theory has prevented my having  | tent clud<br>strong L  | done W mine,<br>to be instructed,<br>torty share.  |  |
| PORTS white on his assume that it  | on of turning and and where tur-<br>c never aftern, ted to be grown be-<br>is the most valuable implement we   | tips Wer<br>foro, to<br>possess,   | Cops A September 1   |  |
| year; it is also useful for land<br>the land begins to the control<br>in a wet season before sowher<br>with barley; and forrolling when<br>in the spring; it quartes the   |  |  |  |  |
| I have experienced very good effects on our light land in Notting-<br>hamshire. In roling our wheat it<br>answers far better than the common<br>roller.  | nsed your clod-consher for several<br>it have found it of the greatest pos-<br>ofit. Integrable the questions con-   | HE STERY   | .5. Johannes.<br>musell, Chestorioli,  |  |
|  | offt, three gardto the questions con-<br>your Circular, Nos 1, \$ 3, and 5<br>beh I have tried your clod-crusher<br>y most her duahle.   | Partie in<br>Partie in<br>Partie I   |  |  |
| I have this year rolled all my   | great pleasure in conveying to you   |  | L. or Whom,  |  |
| with decided alvantage, and with decided alvantage.  N.B. An the present very depression of the present very decided alvantage and the present agreeter bords could not confer a greater benefit outher treanity than by keeping implements, like the  | Also upon barley affected with the wireworm, where it had a good effect, at most taken it in most the property of the state of the stat | aluable<br>aluable<br>ploughin   | Edepth very transport of the Tershine.   |  |
| I have no experience of its use in rolling light land; but I should ima-   | One of my tenants borrowed m   | g the rava   | ges of the wireworm,<br>sher to roll a field of  |  |
| gine it would be greater even than   | It is very efficient in stoppin One of my tenants borrowed m barley. It was almost destroyed injured that the prospect of a crimore than £1 per acre. The lan After once rolling with the cl wireworm stopped entirely. The per acre.  | of was ested was a go<br>od-crusher<br>crop of bar   | mated not to be worth<br>od but a strong loam,<br>, the ravages of the<br>rley yielded 7 quarters  |  |
| It is of great use upon light arable land, as it gives requisite compression without leaving a smooth sur-   | injured that the prospect of a cremore than £1 per acre. The lan After once rolling with the cluwireworm stopped entirely. The   | of was ested was a go<br>od-crusher<br>crop of bar   | mated not to be worth of but a strong loam, , the ravages of the ley yielded 7 quarters  """ """ """ """ """ """ """ """ """   |  |
| ine it would be greater even than on strong land.  It is of great use upon light arable land, as it gives requisite compression without leaving a smooth surface. I have found it valuable for rolling turnips when the surface is crusted.  | injured that the prospect of a cr<br>more than £1 per acre. The lan<br>After once rolling with the cl<br>wireworm stopped entirely. The<br>per acre.  P.S. I do not know a farm of<br>any description whatever where-<br>on it is not applicable with be-<br>nefit to the occupier. No farm<br>of considerable extent ought to   | of was ested was a go<br>od-crusher<br>crop of bar   | mated not to be worth of but a strong loam, , the ravages of the rley yielded 7 quarters  "Black d."   |  |
| It is of great use upon light arable land, as it gives requisite compression without leaving a smooth surface. I have found it valuable for rolling turnips when the surface is crusted.   | injured that the prospect of a cr. more than £1 per acre. The lan After once rolling with the cl wireworm stopped entirely. The per acre.  P.S. I do not know a farm of any description whatever where- on it is not applicable with be- nefit to the occupier. No farm of considerable extent ought to be without one.  An invaluable implement; it stops the ravages of the wireworm   | of was ested was a go<br>od-crusher<br>crop of bar   | mated not to be worth of but a strong loam, , the ravages of the ley yielded 7 quarters  """ """ """ """ """ """ """ """ """   |  |
| It is of great use upon light arable land, as it gives requisite compression without leaving a smooth surface. I have found it valuable for rolling turnips when the surface is crusted.  Tam much pleased with its operation it presses the soil to the roots of the plant, and leaves the land firm. It acts in the same manner, as a gardener presses the soil to the roots of aplant with his setting-stack. The common roller as said to the roots of aplant with his setting-stack. The common roller acts as if, after putting his plant into the hole, he merely contented himself with putting his    | mjured that the prospect of a cr. more than £1 per acre. The lan After once rolling with the cl wireworm stopped entirely. The per acre.  P.S. I do not know a farm of any description whatever where- on it is not applicable with be- nefit to the occupier. No farm of considerable extent ought to be without one.  An invaluable implement; it stops the ravages of the wireworm most effectually.  This question I can answer most decidedly. I am much troubled with the wireworm, and generally I have found once roll- ing with your clou-crusher suffi- cient, when the land is in a proper state. I have never jound the wireworm able to work after twice rolling.   | heart in almost  | mated not to be worth of but a strong loam, , the ravages of the ley yielded 7 quarters  """ """ """ """ """ """ """ """ """   |  |
| It is of great use upon light arable land, as it gives requisite compression without leaving a smooth surface. I have found it valuable for rolling turnips when the surface is crusted.  Todo cas and floatus and languaged in the plant, and leaves the land firm. It acts in the same manner, as a gardener messes the soil to the roots of the plant, and leaves the land firm. It acts in the same manner, as a gardener messes the soil to the roots of aplant with his setting-stack. The common roller acts as if, after putting his plant into the hole, he merely contented himself with putting his | mjured that the prospect of a cr. more than £1 per acre. The lan After once rolling with the cl wireworm stopped entirely. The per acre.  P.S. I do not know a farm of any description whatever where- on it is not applicable with be- nefit to the occupier. No farm of considerable extent ought to be without one.  An invaluable implement; it stops the ravages of the wireworm most effectually.  This question I can answer most decidedly. I am much troubled with the wireworm, and generally I have found once roll- ing with your clou-crusher suffi- cient, when the land is in a proper state. I have never jound the wireworm able to work after twice rolling.   | heart in almost  | mated not to be worth of but a strong loam, the ravages of the received a strong loam, the ravages of the ries yielded 7 quarters a strong load of the received a strong load of the ravage of the rav |  |
| It is of great use upon light arable land, as it gives requisite compression without leaving a smooth surface. I have found it valuable for rolling turnips when the surface is crusted.  The much pleased with its operation it presses the soil to the roots of the plant, and leaves the land firm. It acts in the same manner, as a gardener presses the soil to the roots of a plant with his setting-stack. The common roller acts as if, after putting his plant into the hole, he merely   | injured that the prospect of a cr. more than £1 per acre. The lan After once rolling with the cl wireworm stopped entirely. The per acre.  P.S. I do not know a farm of any description whatever where- on it is not applicable with be- nefit to the occupier. No farm of considerable extent ought to be without one.  An invaluable implement; it stops the ravages of the wireworm most effectually.  This question I can answer most decidedly. I am much troubled with the wireworm, and generally I have found once roll- ing with your clod-crusher suffi- cient, when the land is in a proper state. I have never jound the wireworm, able to work after.   | heart same for the | mated not to be worth of but a strong loam, the ravages of the received a strong loam, the ravages of the ries yielded 7 quarters a strong load of the received a strong load of the ravage of the rav |  |

| 6 - Grass-Lands, Sc.                                       | A1901()  | Query 1—Crushing Clods.  | Query 2-Strong Lands.   |
|--|--|--|---|
| C.R. Colville, M.P.<br>Duffield Hall, Derby.               |  | Most valuable.   | Good for rolling corn in the<br>spring upon lands sown late in<br>the year.   |
| John Wright,<br>Romely, Chesterfield,<br>Derbyshire.       | no seas<br>a good  | re had long experience with your padd-crusher, and have now reduced the land I occupy to good turnip culture; on hitherto has prevented my having crop of turnips upon land where turrere never attempted to be grown bett is the most valuable implement we.  | On strong land sown with wheat in the autumn, and on clover-ley before sowing, I have used the clod-crusher with very great advantage, also after sowing. I think it invaluable for rolling wheat in the spring of the year; it is also useful for land that has been fed on with sheep in a wet season before sowing with barley, and for rolling wheat in the spring; it ensures the growth of clover-seed.   |
| S. Johnson,<br>Somersall, Chesterfield.                    | years, a sible be tained in all w  | e used your clod-crusher for several<br>nd have found it of the greatest pos-<br>mefit. In regard to the questions con-<br>in your Circular, Nos. 1, 2, 3, and 5,<br>hich I have tried your clod-crusher,<br>it most invaluable.   | scaling. In a limit in white case we not not the case of the case |
| HERRY Wood, Cropston, near Mountsorrel, Leicestershire.    | my exp<br>was ind<br>the loa<br>Esq., of<br>valuabl<br>ploughi<br>izing in                       | e great pleasure in conveying to you berience of the clod-crusher, which I luced to order of you last year, after n of my neighbour's, Henry Paget, Bristol. I deem the implement inen, and which are incapable of pulverparching dry seasons. I first used it, ceeded in reducing a seven acre close  | I have this year rolled all my wheats with it in the spring, and with decided advantage.  N.B. In the present very depressed state of agriculture, land-lords could not confer a greater benefit on their tenantry than by keeping implements, like the one in question, for the common use of the occupiers of their land.   |
| de roll a field of a                                       | to a bar   | rley tilth in one day.   | use of the occupiers of their land.   |
| R. Fulshaw,<br>Knighton,<br>Leicestershire.                | questio<br>er, hav   | we great pleasure in answering your<br>ns respecting your patent clod-crush-<br>ing tried it in all several times, and<br>unswer remarkably well.  | List guosa  |
| J. B. BUSHEL,<br>Coleshill,<br>Warwickshire.               | No in equal to   | mplement ever came under my eye of it for this purpose.  | Hisofg eather upon held arela   |
| J. B. Massey,<br>Buntingford,<br>Herts.                    |  | It answers remarkably well.  | It exceeds my most sanguine expectations.   |
| WILLIAM THOMAS,<br>Soilwell,<br>Gloucestershire.           |  | With Very valuable, and with the value of the valuable, and value of the value of t | More suitable than any other implement.   |
|  |  |  | KENT, MIDDLESEX, SURRI  |
| Col. T. Austen.<br>Kippington, Seven Oaks,<br>Kent.        | Swede t<br>I should<br>sowing which I<br>efficient<br>verized<br>seed. In<br>that am<br>cultural | l your clod-crusher last year in premy land for mangold-wurzel and urnips, and but for your clod-crusher d and must have lost my season for as it was. I never had a better crop, attribute in a great measure to the manner in which the groundwas pulby your roller for the reception of the may safely and conscientiously assert ong all the improvements in our agrimachinery, I know none that surour clod-crusher roller.   | It is equally successful in rolling corn after it has been sown, more especially in some of our dry springs, where I could, after the corn was grown up, see how far to a nicety the roller had gone.   |
| Thos, Flight,<br>Laycock's Dairy,<br>Islington, Middlesex. | I am clod-cru great sa it to my I have   | happy to say that I have used your isher in the Isle of Sheppey with atisfaction, and have recommended brother-farmers on the Island, who no doubt, will patronize it also, as equally pleased with it.  | 1116 800  |

#### Crosskill's Patent Clod-Crusher.

#### D HERTPORDSHIRE REPORTS.

|  | Query 4—Wireworm and Grub.   | Que   | ery 5—Grass Lands, &c.  |
|--|--|---|---|
| attempts of the harrow and corn-<br>rusher accomplishes this fully state an ear-ash field broken our clod-crusher, world not bar-  | and is a stiff etay loam, which when<br>be dry becomes so hard as to defy the<br>an roller to reduce them. Your eled-e-<br>its morning seen it reduce to a 37 hbl<br>dryest, which, but for the upperation of your<br>electric formula to have savered the sa-<br>ther is loved while.   | that whe mon in have the since have have have have have have have hav   | M. Broadwoon.<br>(etc., near Dorking,<br>Surrey.  |
| The use of the clod-crusher alweys beneficial when the is is dry. In my opinion it is very reliable implement upon shift soils.  | miles at siled with your clost-costler,<br>b much cross set of by all my friends<br>t polyces as much more effectively<br>y other by a constrantistic for set<br>is project state for either at the settle   | and it i<br>bore,<br>that on  | ". Marriano,<br>" -a. Grin-tead,<br>"hybl, Ensex.   |
| Strong lend, which is too rouse or cloudly to be sown with who should be rulled with your cloud which wouldness wouldness to the large watcher wouldness to the large watcher wouldness to the large watcher w | a spring of l. 1 l. 1 2 acres of<br>the state of hy man in wife weather<br>the state of hy manufactory in this sea<br>to be seen a state of the state of the   |   | n barn, Harsley,<br>measter, Harsley,<br>measter, limits.   |
| revieler provious to the le-<br>ntrogenes. It is involvable<br>the spring, and earres a year di-<br>to te bour thruthwand harro-<br>ing to get the bad auticless<br>the for badley-seeds and trud-<br>the for badley-seeds and trud-   | I send that not not got the limit fined fined for the limit for the limi | digirung<br>millana<br>milland<br>millana<br>millana  |   |
| One of my neighbours used the rusher upon several fields of ligands this spring, for the purpose,  | ht   wheat from the ravages of the   wireworm by the timely use of   |   |   |
| or which purpose it has answeredly.  A befining from as any I will have tell that a surport in the surport in t | ed P.S. My clod-crusher has been<br>in such request that I have little<br>doubt but most of our parishes<br>will be induced to have one in<br>common. This I recommend, as<br>one crusher is capable of doing an<br>amazing amount of such   | It not<br>Very vi<br>It not<br>some a<br>second   | (*, 1800 (Side)<br>Theory (void)<br>The North (Side)<br>Voide, Clare gar-<br>thre, Cut-   |
| which purpose it has answere ully.  I was no much less that we say I was not the less that we will be the less that the less tha | P.S. My clod-crusher has been in such request that I have little doubt but most of our parishes will be induced to have one in common. This I recommend, as one crusher is capable of doing an amazing amount of work.   | Very vial<br>le roch<br>some a<br>some a<br>contract  | Jacob, Roule<br>a Could Salle<br>could Salle<br>builty Colession<br>three Colession   |
| or which purpose it has answeredly.  A beginner darm on any I within a range of the amount of the property of  | P.S. My clod-crusher has been in such request that I have little doubt but most of our parishes will be induced to have one in common. This I recommend, as one crusher is capable of doing an amazing amount of work.  An effectual remedy.   | dua /l<br>o a nos<br>lecces<br>lecces<br>desces<br>desces<br>desces<br>desces<br>desces<br>desces<br>desces<br>desces<br>desces<br>desces<br>desces<br>desces<br>desces<br>desces<br>desces<br>desces<br>desces<br>desces<br>desces<br>desces<br>desces<br>desces<br>desces<br>desces<br>desces<br>desces<br>desces<br>desces<br>desces<br>desces<br>desces<br>desces<br>desces<br>desces<br>desces<br>desces<br>desces<br>desces<br>desces<br>desces<br>desces<br>desces<br>desces<br>desces<br>desces<br>desces<br>desces<br>desces<br>desces<br>desces<br>desces<br>desces<br>desces<br>desces<br>desces<br>desces<br>desces<br>desces<br>desces<br>desces<br>desces<br>desces<br>desces<br>desces<br>desces<br>desces<br>desces<br>desces<br>desces<br>desces<br>desces<br>desces<br>desces<br>desces<br>desces<br>desces<br>desces<br>desces<br>desces<br>desces<br>desces<br>desces<br>desces<br>desces<br>desces<br>desces<br>desces<br>desces<br>desces<br>desces<br>desces<br>desces<br>desces<br>desces<br>desces<br>desces<br>desces<br>desces<br>desces<br>desces<br>desces<br>desces<br>desces<br>desces<br>desces<br>desces<br>desces<br>desces<br>desces<br>desces<br>desces<br>desces<br>desces<br>desces<br>desces<br>desces<br>desces<br>desces<br>desces<br>desces<br>desces<br>desces<br>desces<br>desces<br>desces<br>desces<br>desces<br>desces<br>desces<br>desces<br>desces<br>desces<br>desces<br>desces<br>desces<br>desces<br>desces<br>desces<br>desces<br>desces<br>desces<br>desces<br>desces<br>desces<br>desces<br>desces<br>desces<br>desces<br>desces<br>desces<br>desces<br>desces<br>desces<br>desces<br>desces<br>desces<br>desces<br>desces<br>desces<br>desces<br>desces<br>desces<br>desces<br>desces<br>desces<br>desces<br>desces<br>desces<br>desces<br>desces<br>desces<br>desces<br>desces<br>desces<br>desces<br>desces<br>desces<br>desces<br>desces<br>desces<br>desces<br>desces<br>desces<br>desces<br>desces<br>desces<br>desces<br>desces<br>desces<br>desces<br>desces<br>desces<br>desces<br>desces<br>desces<br>desces<br>desces<br>desces<br>desces<br>desces<br>desces<br>desces<br>desces<br>desces<br>desces<br>desces<br>desces<br>desces<br>desces<br>desces<br>desces<br>desces<br>desces<br>desces<br>desces<br>desces<br>des<br>des<br>desces<br>des<br>des<br>des<br>des<br>des<br>des<br>des<br>des<br>des<br>d | Janes, Konil.  in 'X Form's.  in within addition validate, Claims gan- three Cartes gan- three Conic gan-                         |
| the centure, both lest sear and the grain to do on the large tried truly a sense of grain and the grain to continue the continue to the contin | P.S. My clod-crusher has been in such request that I have little doubt but most of our parishes will be induced to have one in common. This I recommend, as one crusher is capable of doing an amazing amount of work.  An effectual remedy.   | dior A  n noe  le noe   | James, Koull.  Jan S Fownte. Action (Sadle. blinder, Clarice gan- blinder, Clarice gan- care and October action of the Coulombre. |

#### SEX, AND HAMPSHIRE REPORTS.

| The answer to the former question speaks with equal force to this; for if the roller did good on the former rase, it stands to reason that it must, if possible, do more good on light and loosened by the frost. | P.S. I have had no experience upon grass-land, but should infer, if we are right in our theory, that the treading of sheep is conductive to the removal of moss, the crushing-roller must necessarily be more so. |
|---|---|
|   |   |
|   | <br>1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1   |

KENT, MIDDLESEX, SUR

| y 5—Orașe Landa, S   | Query 1—Crushing Clods.   | Query 2-Strong Lands.  |
|--|---|--|
| J. M. BROADWOOD.<br>Lyne, near Dorking,<br>Surrey.                         | My land is a stiff clay loam, which when that when dry becomes so hard as to defy the mon iron roller to reduce them. Your clod-chave this morning seen it reduce to a friable since harvest, which, but for the operation of y furnished grit enough to have covered the se clod crusher is invaluable.  | attempts of the harrow and cor<br>rusher accomplishes this fully.<br>e state an oat-ash field broken i<br>our clod-crusher, would not ha   |
| G. MAITLAND,<br>East Grinstead,<br>Hartfield, Sussex.                      | I am quite satisfied with your clod-crusher, and it is much approved of by all my friends here. It pulverizes much more effectually than any other implement, rendering the surface in a proper state for drilling in the seed.   | The use of the clod-crusher always beneficial when the latis dry. In my opinion it is very valuable implement upo our stiff soils.   |
| WILLIAM WALTON,<br>Merdon Farm, Hursley,<br>Winchester, Hants.             | In the spring of 1842, I had 24 acres of swedes all eaten off by sheep in wet weather upon strong land. It ploughed up in lumps as big as horses' heads; without the clod-crusher I could not have got the land fine enough for barley. I grew? quarters of fine malting barley per acre. Several of my neighbours, who were in the same situation, had not a crusher, and grew 2 to 3 quarters of their barley per acre.   | Strong land, which is too roug or cloddy to be sown with when should be rolled with your cloderusher previous to the last ploughing. It is invaluable the spring, and saves a greated of labour in rolling and harrowing, to get the land sufficiently fine for barley-seeds and tumps.  |
|  | 7, 96, 4 19, 14, 19   | (m= pare)  |
| G. Jennings,<br>Dover, Kent.   | It answers well for strong and light soils.<br>Very valuable for crushing clods.  | 1000   |
| JOHN POWELL,<br>Boverton Castle,<br>Cowbridge, Glamorgan-<br>shire, Wales. | It reduces clods perfectly in the driest seasons, although it sometimes has required a second application, more particularly forbarley after turnips. I have found it a most valuable implement upon strong lands.  | I was so much satisfied wit its results, both last year and th year before, when I tried it upo some of mywheats in the spring that I have this year applied it the whole of my wheats with the same beneficial results.   |
| JOHN OMEROD,<br>Bryn-y-hynon, Ruthin,<br>Wales.                            | I can merely state that I have tried your clod-crusher for breaking up rough, cloddy land, and also for preparing land for turnips, and have found it to answer very well, provided the land be in a dry state.   | -  |
| G. Jacson. Barton Lodge, near Preston, Lancashire.                         | I have only the experience of this season, during which I have found it a valuable implement.   | Exceedingly useful.  |
| Rev. C. GLYNN, Hawarden Rectory, Chester.                                  | I am very glad to have this opportunity of bearing witness of the efficacy of your patent clod-crusher. Lhave used itentirely upon the strongest fallow, and am confident that without it, in a dry season, one particular field of blue clay in my occupation could not have been worked at all. I have lent it to many of my neighbours, who all express their unqualified approbation of its usefulness.   | The state of the s |
| W. Jonson, Chillingham Newtown, Wooler, Northumberland.                    | I have found it most valuable in crushing clods, on soils which are tenacious, in preparing them for turnips, in a dry season. Also for similar soils, after turnips, in a dry season. In the month of April, in preparing for barley, I have found it a most useful and efficient implement. It was my steward's opinion, in consequence of very dry spring seasons, some of my clay soils, intended for green crops, would have remained fallow had I been without the implement. | I ploughed, harrowed, and clod-crushed a field of this description of 24 acres, after turnips, and had a crop of barleyed 60 bushels per acre, by which reckoned the produce was nearly doubled.   |
| H. CLIFFE,<br>Bellvue, Enniscorthy,<br>Ireland.                            |   | I have used it in rolling whea<br>with good effect, and in prepar<br>ing light land for turnip-crops.  |

SSEX, AND HAMPSHIRE REPORTS—Continued.

| Query 3—Light Lands.  | Query 4—Wireworm, Grub, &c.  | Query 5—Grass Lands. |
|---|--|----------------------|
| This question I consider to be most important. Light thin land must be compressed and got as close as possible together; to accomplish this, we tread the land with sheep after sowing wheat, which I have no doubt does the sheep a deal of harm in many respects. I consider the clod-crusher much better and safer for wheat. If rain comes after sheep treading, it leaves scales upon the land; the clod-crusher makes the land firm and close under, and a little rough at the top. | Where I have used the clod- crusher, my corn has not been ravaged by the wireworm or grub I have no doubt it would be use- ful on mossy grass-lands. P.S. I have olten said at the markets, and now repeat it, that if there was not another clod- crusher to be got, I would not- take a thousand pounds for mine. I have 500 acres of light and 300 acres of strong land under the plough. It is invaluable. |                      |
| Wheat on strong and light lands, and especially on stony and gravelly lands, are greatly improved by the use of the clod-crusherin the spring, particularly after turnips and cloverley, it is much superior to the pegroller after sowing.   | I have no hesitation in saying I have found it a specific to the wireworm. P.S. In my opinion no farmer should be without one.   |                      |

Kirskill, near Otley, Yorkshire, June 6th, 1844.

#### Mr. W. Crosskill,

Sir,—If ever a thing answered the purpose for which it was made, your patent clod-crusher does, and I only regret I had not heard of your roller years ago.

I have the honor to be, Yours, &c.

W. RHODES.

Halewood, near Liverpool, May 6th, 1844

#### Mr. Crosskill,

I have tried your clod-crusher extensively on some heavy land during the late dry weather, as well as on some wheat, sown in November and December last. I have also worked it in a bean-field, sown in the drill, by drawing from the axie such of the wheels as would have pressed upon the rows of beans, and substituting an iron collar in their place.

In every instance the effect has exceeded my most sanguine expectations; instead of being, as I was last year, hampered by clods that the heaviest roller I could procure drawn by four horses entirely failed in subduing, I have my land this year in beautiful order for my turnip sowing; I have never had to go more than twice over on the heaviest, and only once over by far the greater portion of it. This is entirely attributable to your clod-crusher, and I with pleasure add my testimony, not only to its efficacy, but to the obligation I consider all tillers of heavy land are under to you for so valuable an invention.

I am, Sir,

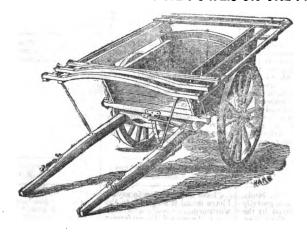
Your obedient Servant, ROBERT NEILSON.

### CROSSKILL'S

## IMPROVED ONE HORSE CARTS,

Mounted on Patent Wheels and Axles Manufactured by Machinery,

#### FOR THE REDUCTION OF HORSE POWER ON THE FARM.



#### CROSSKILL'S PRIZE ONE HORSE CART.

A strong, useful, and cheap, One Horse "Model" Cart, fitted with Harvest shelvings complete, and adapted for general Farm Work.

Awarded the Head Prize of Five Sovereigns by the Royal Society of England, at Newcastle; also Two Sovereigns at the Royal Shrewsbury Meeting, 1844. The Silver Medal at the Limerick Meeting of the Royal Irish Society, 1846. The North Lincolnshire Agricultural Society's Prizes in 1845 and 1846; and Prizes or Medals at other Provincial Meetings.

The Body of the Cart is constructed of Oak frame, and strong plank sides, with loses aide boards, made larger than Scotch Carts, and the Ironwork more complete in several parts; combining great strength, with lightness and ease of draught. The cart tipper placed in front of the Cart, is a safe and simple plan for relieving the horse of the pressure from a heavy load, when descending hills.

In Norfolk, where manure is delivered in small heaps upon the land, this plan is much approved of. The Cart will carry a solid load of 30 cwi. or 5 qrs. of wheat, with one horse. These Carts are now in use in Yorkshire, Lincolnshire, Norfolk, Notts, and nearly every other County in England.

For the advantages of One Horse Carts, see P. Pusey, Esquire's Report, in the Journal of the Royal Agricultural Society of England. And in a Trial, reported in vol. IV. part 2, 1843, page 305, it is proved that the amount of saving in Horses and Horse keep, is of mational importance.

 $\mathsf{Digitized}\,\mathsf{by}\,Google$